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Administrative Services

May 31, 1995

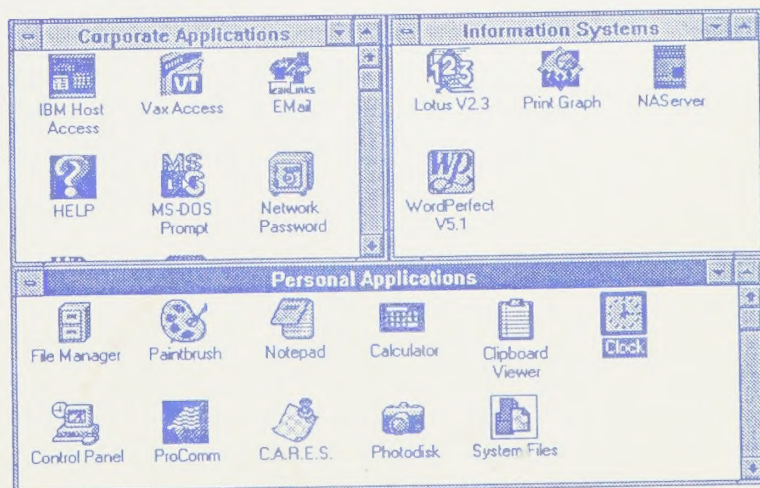
URBAN MUNICIPAL

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GOVERNMENT DOCUMENTS

The Region of Hamilton-Wentworth  
and the City of Hamilton

Information Systems  
1994 Annual Report



... about the cover  
The cover includes the Graphical  
User Interface (GUI) to the  
Corporate Standard Network



# INFORMATION SYSTEMS



THE REGIONAL MUNICIPALITY OF HAMILTON-WENTWORTH  
AND THE CORPORATION OF THE CITY OF HAMILTON  
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Chairman and Members,    Administrative Services Committee  
   The Regional Municipality of Hamilton-Wentworth

Chairman and Members,    The Finance and Administration Committee  
   The Corporation of the City of Hamilton

I am pleased to submit the Annual Report for the Information Systems Department for 1994. This Annual Report represents an overview of the operations of the Department for the reporting year as well as for comparative previous years. The Annual Report includes financial expenditures and revenues and an overview of the types, quantities and cost of all services provided. The Report also includes the major issues and milestones for the Information Systems Department and our Customers.

## **Mandate**

Information Systems is a joint Department of The Regional Municipality of Hamilton-Wentworth and The Corporation of the City of Hamilton that provides information technology services to both Municipalities.

The Information Technology (IT) services provided by the Department include the management of many large and complex systems applications, the operation of shared computing resources, the provision of a common computer communications network, the acquisition and support of all PC workstations, and the management of a shared telephone communications system on behalf of both Municipalities.

## **1994 - Downsizing and Automation**

1994 was a year which continued to reflect the pressures and changes that are occurring in both Municipalities as they adjust to current economic conditions and changes to the business environment. Downsizing, restructuring, continuous improvement, and empowerment, have all impacted the operations of the Corporations. Departments have been increasingly deploying information technology as one means of reducing longer term staffing costs and improving customer service.

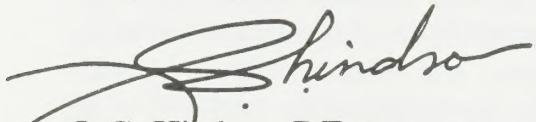


### **1995 Outlook - Maintenance Level Funding & Continuous Improvement**

Although the demand for information technology solutions continues to increase, the pressures on department budgets are to the extent that most information system applications are in "maintenance only" mode with low levels of investment in new or enhanced applications. However, progress continues to be made at extending the Corporate Network to additional locations and users, thereby increasing the opportunities to use the network as one means of facilitating employee workgroups and reducing processing times and staffing costs.

Information Systems is implementing the continuous improvement "culture" changes within the department. Staff are involved in workshop sessions to develop the expertise required to review and reduce processing steps and move more decision-making to front-line staff.

Respectfully Submitted



J. G. Hindson, P.Eng.  
Director of Information Systems

## Executive Summary

In 1994, the Region's and City's Information Systems clients continued to increase their use of Information Technology (IT) and the resources of the Information Systems Department as one means of improving their services and efficiency while reducing their staffing costs.

This summary highlights other important trends, major accomplishments, and emerging issues that affect Information Systems including:

### Trends

- ▶ *Total clients up over 60% since 1989* - our total clients, both terminal and PC-based have grown by over 68% since 1989 (see page 12 in the report for further details).
- ▶ *PC clients up over 200% since 1990* - PC clients have increased by over 200% since 1990 and now total 950 PC workstations (see page 18 in the report for further details).
- ▶ *Information Systems client costs have decreased since 1990 despite client and volume growth* - Despite the client and volume growth that has increased as a result of the additional use of information technology, charges to clients have decreased in recent years (see page 6 in the report for further details).
- ▶ *Sharing of software and expertise continues* - Software and technology expertise developed for one corporation is routinely shared between both organizations. In 1994 networking expertise and projects involving point-of-sale, and accounting systems technology was shared between the corporations (see page 1 in the report for further details).

### Accomplishments

- ▶ *Ongoing Corporate Network Development to meet future needs* - In 1994, Information Systems continued with the implementation of a high speed corporate network with additional departments being brought on line and the initiation of the conversion of all users in the Unix environment to the corporate standard. (see the Information Technology Architecture chart at the end of this Section).
- ▶ *Surveys indicate high levels of client satisfaction with the exception of two departments* - Information Systems continued with confidential surveys in 1994 to measure quantitatively client satisfaction. Overall results indicated a high degree of client satisfaction with Information Systems services.(see page 8 and Appendix B in the report for further details).
- ▶ *Information Systems Development of a Restructuring Plan* - A Restructuring Plan was developed that moves forward with the delayering and downsizing of the organization via attrition rather than layoffs which would jeopardize the Continuous Improvement initiatives.
- ▶ *Phone system projects continue to yield savings and expanded services features* - Information Systems continued to work with the Region and City departments to expand area-wide "546" Centrex services. Total phone system costs in 1994 were more than \$250,000 less than 1993 when taxes are included (see page 22 in the report for further details)

### Issues

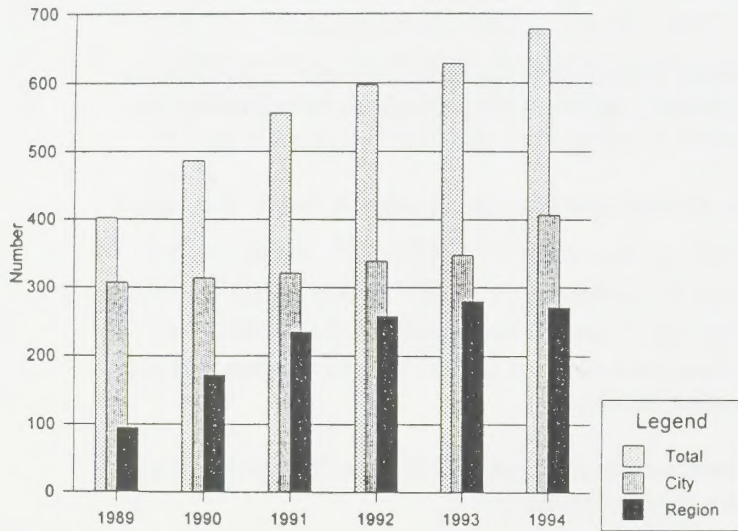
- ▶ *Costs and service quality appear competitive but further work planned* - Information Systems continues to compare costs with the public and private sectors and measure the quality of customer service provided by the shared information systems service. Data includes cost comparisons with other



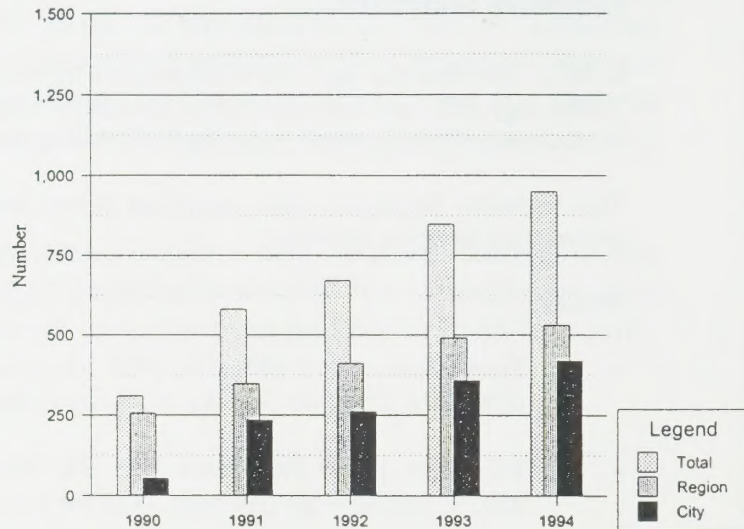
# The Region of Hamilton-Wentworth and The City of Hamilton

## INFORMATION SYSTEMS

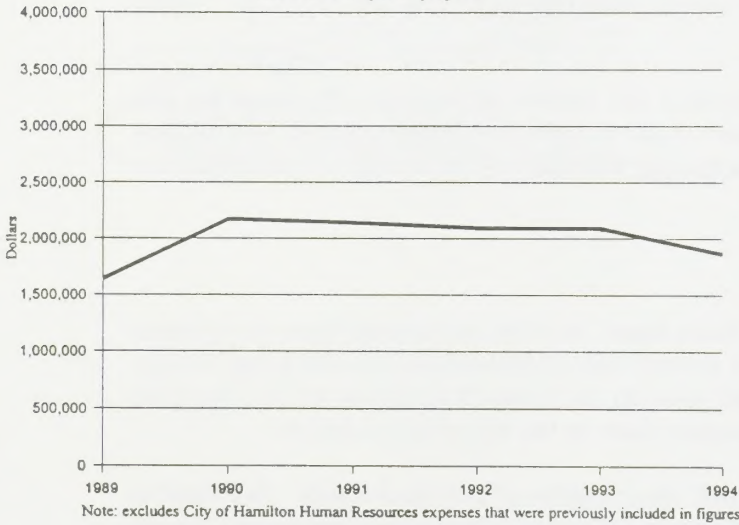
Central Processor (Mainframe) Connections



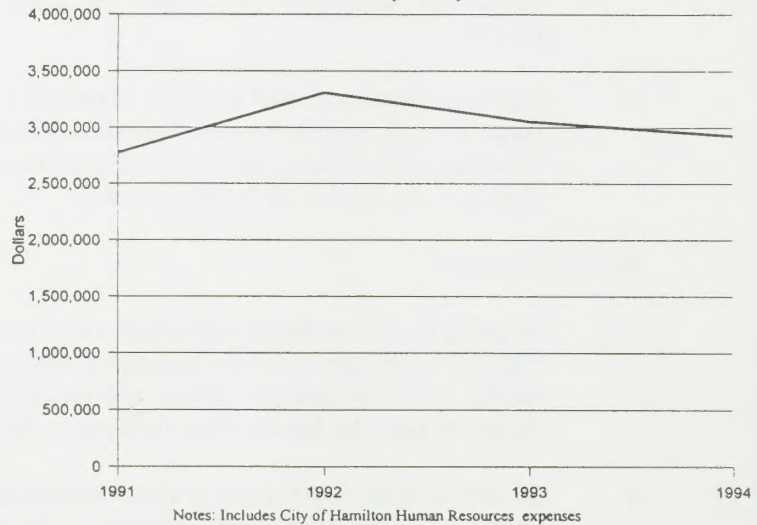
PC Workstations



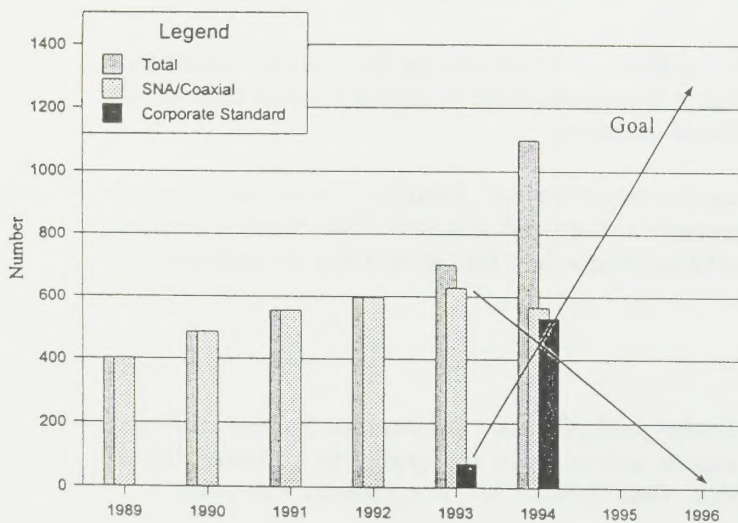
Region Baseline IT Expenses  
less PCs and special projects



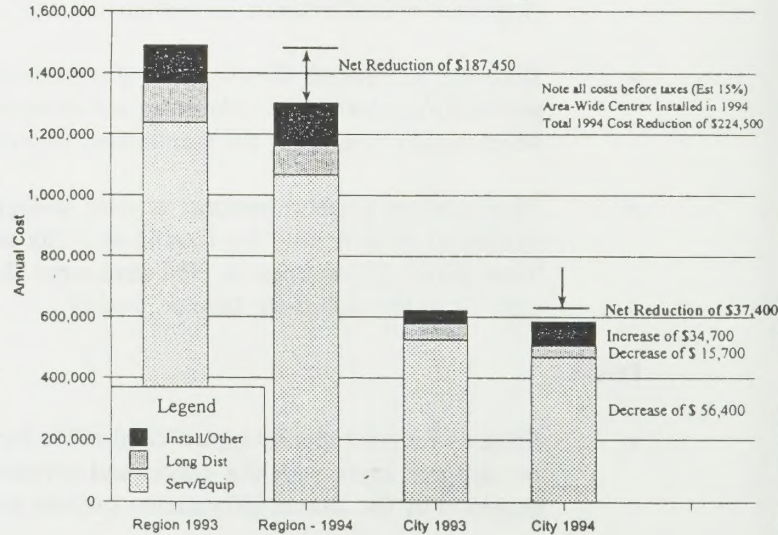
City Baseline IT Expenses  
less PCs and Telephone System



Corporate Network Connections



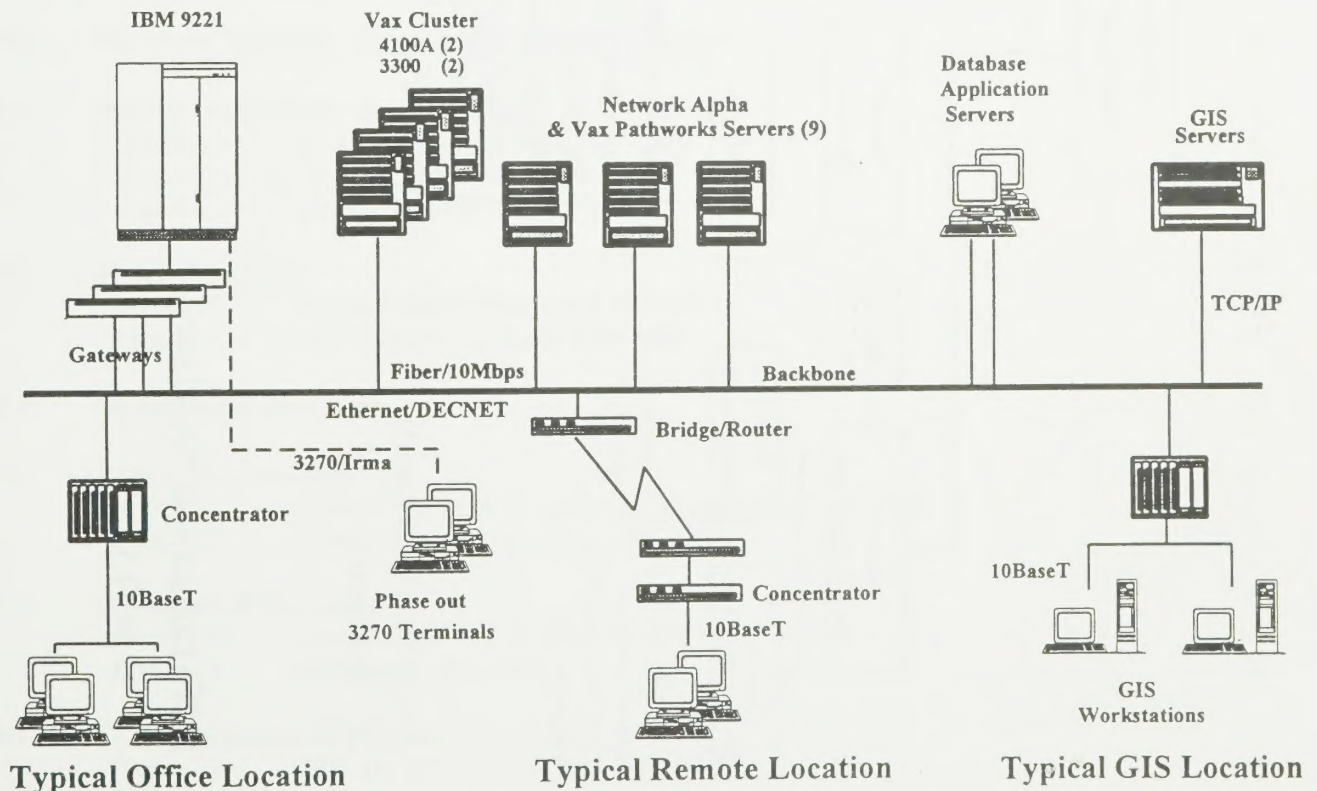
Total Telephone/Communications Billings



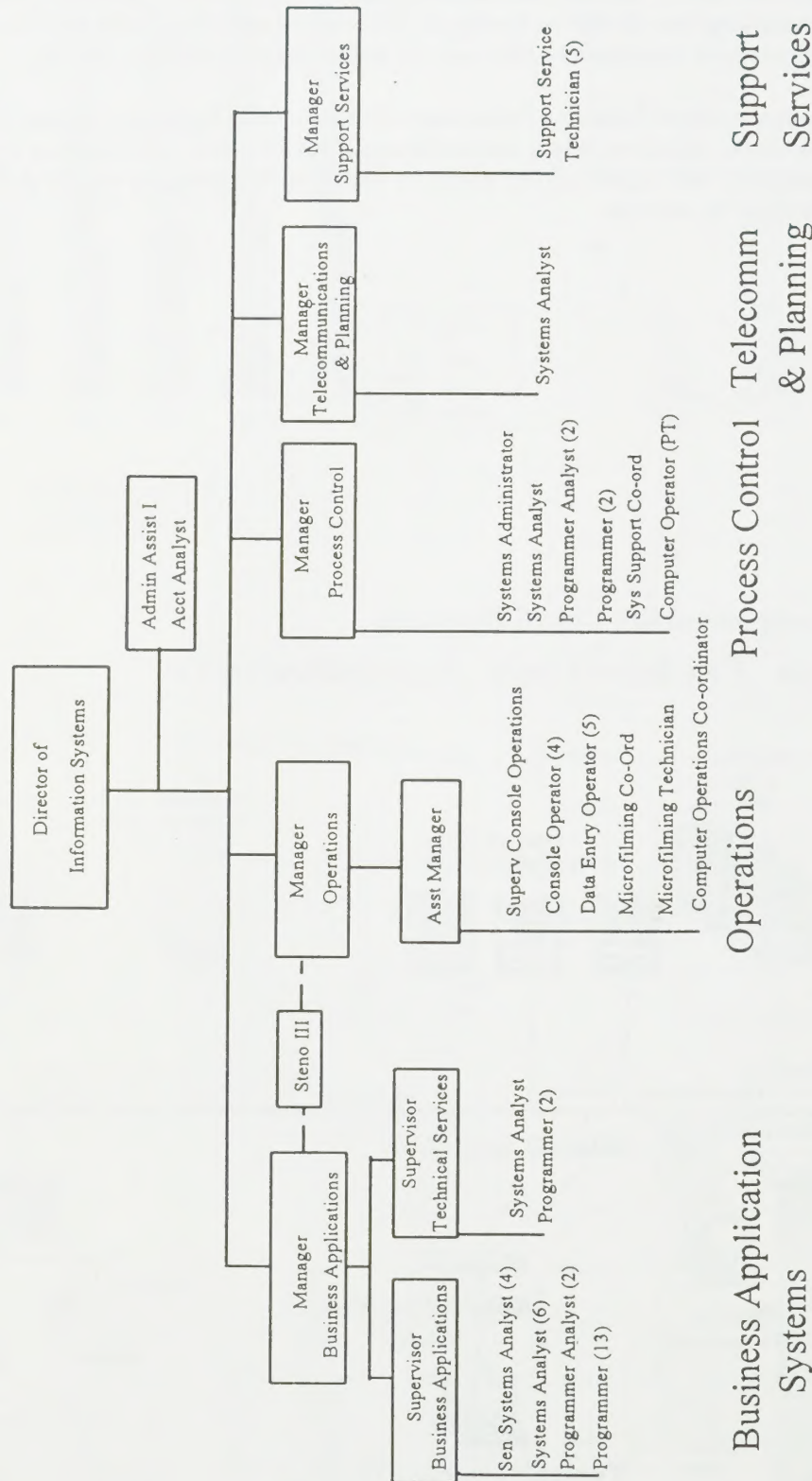
Canadian municipalities on total costs and capabilities, competitive analysis on charge-back rates of key cost elements with the private sectors (e.g. Systems Analysis, Programming, PCs) and the client satisfaction data discussed above. Because cost effectiveness and service levels are important to our clients, further benchmarking data should be developed. This data would assist in the identification of potential further improvement opportunities (see page 10 in the report for further details)

- **Continuous Improvement vs Other Reduction Techniques** - The ability of Information Systems to sustain its continuous improvement initiatives (whose successful application involves the reduction of staffing via relocation and attrition), will depend on the extent to which the Corporations retains their ability to achieve staff reductions via attrition.

## Region of Hamilton Wentworth / City of Hamilton Information Technology Architecture







## Information Systems 1994

Total (FTE) 66.5  
 Line 57.5  
 Staff 9  
 Line/Staff Ratio 6.4 / 1



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The Region of Hamilton-Wentworth and The City of Hamilton  
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## **Overview of Organization Structure**

The Information Systems Department provides Information Technology services to the Region of Hamilton-Wentworth and the City of Hamilton and is organized into division and functions as follows; (also see Organization Chart - opposite)

### ***The Business Application Systems Division***

- ▶ manages the development and maintenance of corporate and department business systems applications used by the Municipal corporations.

### ***The Operations Division***

- ▶ manages the scheduling and execution of all mainframe-based applications for both on-line and batch processing environments, including the printing, coaxial network and corporate microfilming functions.

### ***The Support Services Division***

- ▶ supports the current 950 PC workstations with acquisition, installation, training and support and operates the User Help line.

### ***The Process Control Division***

- ▶ manages all process control (transit, water and sewer infrastructure) applications, the major Transit business applications and an increasing number of applications for other Departments. The Process Control Division also provides corporate network development and management functions.

### ***The Telecommunications & Planning Function***

- ▶ supports the Telephone and Telecommunications operations, the implementation of the corporate network infrastructure, long range disaster recovery planning, and the coordination of voice and data communications and between Region and City Departments and Boards.

## **1. Major Milestones in 1994**

The major milestones for the development and use of Information Technology for the Region and the City of Hamilton in 1994 were:

### **Region and City**

- ▶ Joint research in automating the cashiering functions (Point-of-Sale systems) including optical character recognition technology and installation of a point-of-sale system in the Revenue Division of Regional Finance with connection to the Corporate Network.
- ▶ Research and development of networking accounting software for the Trust Fund Accounting System for the Region's Maccassa and Wentworth lodges. The same technology will be used by the City to network its accounts receivable system.
- ▶ Continuous improvement modifications to the payroll process for; user access for on-line report editing, corrections, control cards, record of employment, and table file updates. These improvements have reduced the cycle times for the weekly payroll process.
- ▶ Developed and implemented new direct deposit forms for City (June 8, 1994) and Region (for 1995 January 1) resulting in cost savings from using standard paper rather than pre-printed custom forms.

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- ▶ Time sheet pre-edits were expanded in order to reduce payroll processing times.
- ▶ Payroll/Pension requests were processed for: OMERS 119 modifications for social contract, changes to; benefits, pay equity, HMRF retirement pension deductions, UIC year-end reports for City, councillors payroll, and other special reports.
- ▶ Access provided to Payroll/Pension report-writing modules for all payroll users (City, Region and HSR) in order to generate ad hoc reports.
- ▶ Participation in the focus groups that defined the needs and requirements for the proposed Human Resources Information System (HRIS).
- ▶ Improved security for Human Resources applications with a single entry point and access method for all applications developed in the Focus programming language. The data files were moved to a single storage area. The ability to grant security access to the various applications was transferred to Human Resources management.
- ▶ Human Resources requests processed for: seniority date adjustment process, pay equity, attendance reports, social contract reports, group life reports, WCB report, Attendance Management System (AMS) updates and improvements, early retirement reports and analysis, Philips reports, and reports for retroactive payments for merits between 1993 January 1 and June 13.
- ▶ Off-site mainframe printing facility for smaller reports was implemented for the Human Resources Department offices at 25 Main Street West.
- ▶ A large volume of maintenance work orders were processed for the Fleet Management, Maintenance Management and Financial systems.
- ▶ A common interface was developed which allows any source system to load special invoices such as the Elderly Citizens Tax rebates into the Accounts Payable system for automated cheque production. This new process resulted in cost and workload reductions for the corporations.

#### **Region of Hamilton-Wentworth**

- ▶ The annual payroll budget routine was rewritten for the Region.
- ▶ Implementation of Direct Deposit for Social Services Income Maintenance Clients.
- ▶ Implementation of direct inquiry for Unemployment Insurance (UI) Data. The Region is the first municipality in Canada to have this feature.
- ▶ Implementation of an on-line Social Services Case Management Summary facility.
- ▶ Management of the Portable Technology Survey on behalf of the Ontario Ministry of Community and Social Services.
- ▶ Additional capability to enter on-line messages to be printed on Social Services client cheques and direct deposit statements.
- ▶ Implementation of a Day Care Booking system.
- ▶ Implementation of a Metered Water on-line Status Certificates system.



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- ▶ Implementation of a Point of Sale (POS) terminal and interface to the Region's Accounts Receivable system.
- ▶ Implementation of a computerized customer billing system for the Helping Hands division of Social Services.
- ▶ An initial group of Roads Department Users were converted to the Corporate Network PC environment from the former Unix environment.
- ▶ Conversion of some Roads Department DBASE applications to the FoxPro software environment on the network.
- ▶ Conversion of the R.E.S. Recycling directory to FoxPro Database environment. This conversion also resulted in the implementation of *Postscript* printing capability, and a saving in publishing costs.
- ▶ Conversion of the Aircraft Billing System to FoxPro for Windows resulted in greater operating stability for this application.

#### **City of Hamilton**

- ▶ 94 Civic Election - Information Systems staff were significantly involved in the operations associated with compiling the 1994 Municipal Election results
- ▶ Hamilton Public Library - Steady progress was made toward the acquisition of a new automated, integrated library system. Several reports and conversion files were developed to aid in the refining of the current database in order to make the transition to the new system easier for Library staff.
- ▶ New Tax System - Work continued on the development of detailed specifications for this major project. Several programs have been written and the Property Inquiry portion of the system was approved by the user. A new workstation platform was installed which has significantly improved the response time for the developers.
- ▶ Current Tax System - The first phase of the "Tax Appeal" system was developed and implemented, using the new technology, resulting in the reduction of a major backlog in tax appeals processing. Several minor modifications were made to the existing system which streamlined the processing of information for the Treasury Department. Cost reductions were achieved by changing the methods of producing "Large Agent" tax bills. A "download" of Agent Bills for PC processing by the banks has significantly reduced the amount of manual work by both the Banks and the Treasury Department. Additional cost savings were achieved by transferring a number of large reports to (COM) Computer Output on Microfilm instead of hard copy.
- ▶ Parking Offenses Act - Several legislative changes were implemented over the course of 1994.
- ▶ Clerk's Trade Licence System - Components of the system were converted to a new form which resulted in form cost savings.
- ▶ Fleet services - Eleven users at the City Garage were added to the Corporate Network with access also provided to the Fleet Services Unix-based software application.

## 2. Expenses and Revenues

Information Systems operates on a "co-op" basis on behalf of both Municipal Corporations. Each type of service is charged based on the expenditures directly associated with the service divided by the number of units of the service provided. At the end of each fiscal year, year-end cost adjustments are made based on the actual expenditures and units of each type of service provided during the year. This method ensures that both the municipal corporations (Region and the City) pay the same rate for each service based on actual costs and Information Systems incurs no profit or loss.

This Annual Report includes expense and revenue information from 1990 to 1994, depending on the scope of the information presented. The reporting of financial information has been on the same "cost-centre" basis since 1990. Prior to 1990, administrative overhead and support service costs were charged separately. As costing information for 1989 is not comparative to later years, it is not included. However, unit consumption data for 1989 is comparative and is therefore included. The information presented in Section 2 through 4 is for the majority of I/S services with the exception of the Process Control Division, whose expenses and activities are reported separately in Section 7.

### 2.1 Expenses

Total expenses for 1994 were \$ 7,108,550 or \$19,560 more than 1993 (\$7,088,990). Expenses were distributed by object-of-expenditure in accordance with *Figure 1* (which includes departmental PC workstations and City of Hamilton telephone costs). There was no significant change in the percentage distribution of expenses in 1994 as compared to 1993.

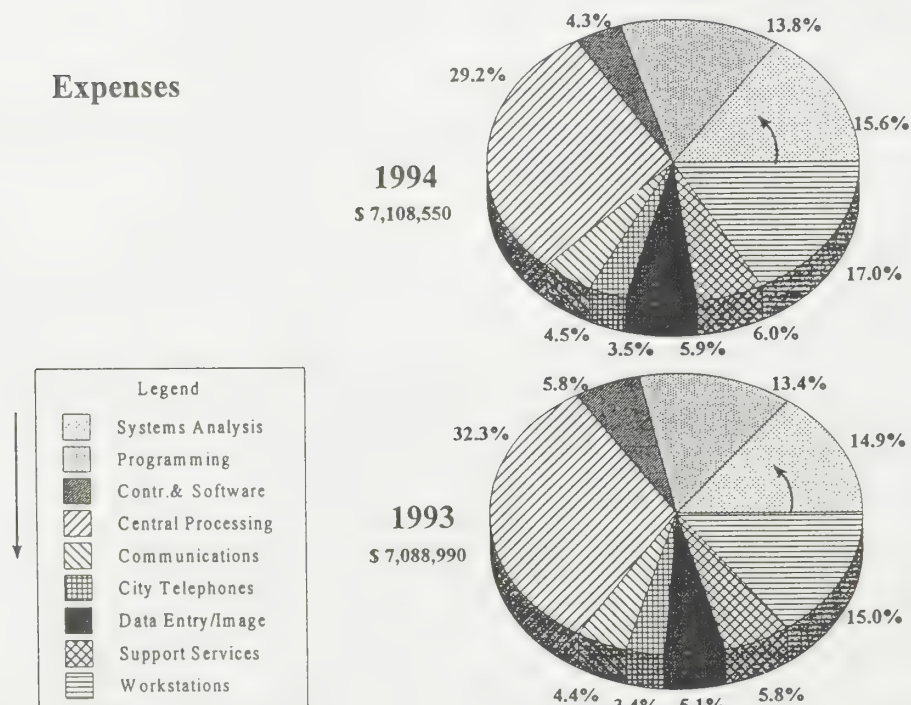


Figure 1



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In order to provide a basis of comparison with typical information technology operations, *Figure 2* represents expenses excluding departmental PC workstations and City of Hamilton telephone expenses. The distribution of expenditures is typical of Canadian information technology organizations <sup>1</sup>.

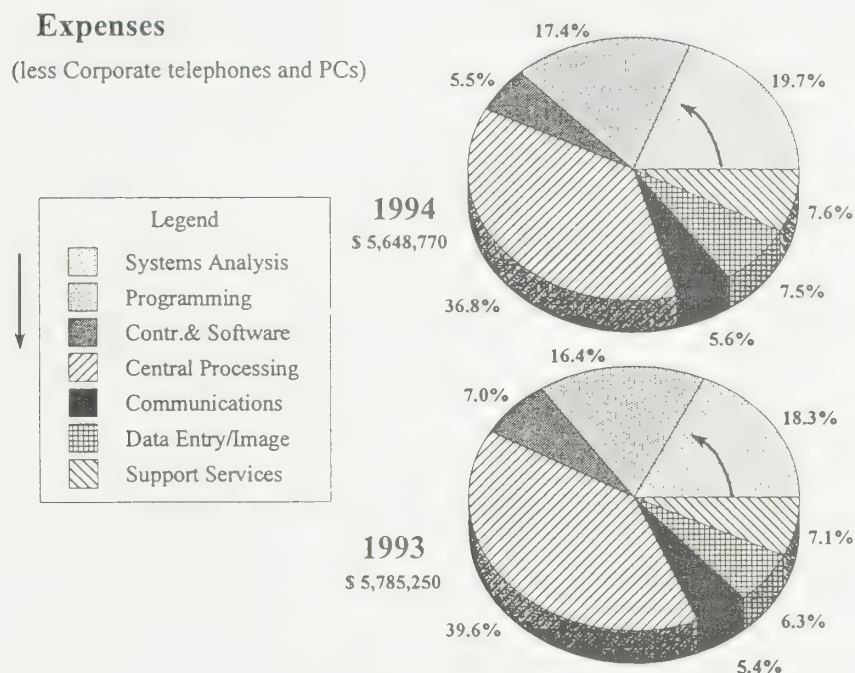


Figure 2

Most Information Technology expenses are centrally reported within the Information Systems budget for both municipal corporations. For example, all department PCs, systems analysis and programming activities<sup>2</sup> are included in the I/S budget. Although this is an effective means of determining the overall IT cost to the Corporation, caution should be exercised in drawing direct comparisons with other jurisdictions who may include large portions (as much as 25%) of IT expenses within individual departmental budgets<sup>3</sup>.

Based on a 1993 survey of five other municipalities in Canada, the Region and City's total IT costs were less (expressed as a percentage of budget) than all five municipalities and staff size was less than most of the other Municipalities in the survey. (See Appendix A)

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<sup>1</sup> International Information Technology Review - Price Waterhouse 1991  
Hardware 32%, Communications 8%, Software 10%, Personnel 42%, Outside Services 8%

<sup>2</sup> Includes Information Technology expenses for all Region and City Departments except Regional Boards and the Parcil Project which are reported separately.

<sup>3</sup> Information Systems Strategic Planning - Computer Technology Research Corporation, 1991; also Page 9, International Information Technology Survey - Price Waterhouse 1991

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As a basis of comparison for determining the Region's "baseline" expenses managed directly by the Information Systems Department, *Figure 3* represents the "baseline" costs for Regional information technology that excludes expenses determined directly by the Departments such as PC workstations, telephones, and capital projects. In the period from 1990 to 1994, Regional expenses for "baseline" services have remained virtually flat with a slight decrease in 1994. Increases above baseline during this period (which are not included in *Figure 3*) have been for special service requests associated with; the implementation of the major modifications required for an Attendance Management Reporting System, contract services provided for the Parcel Project and contract work on Social Services Systems.

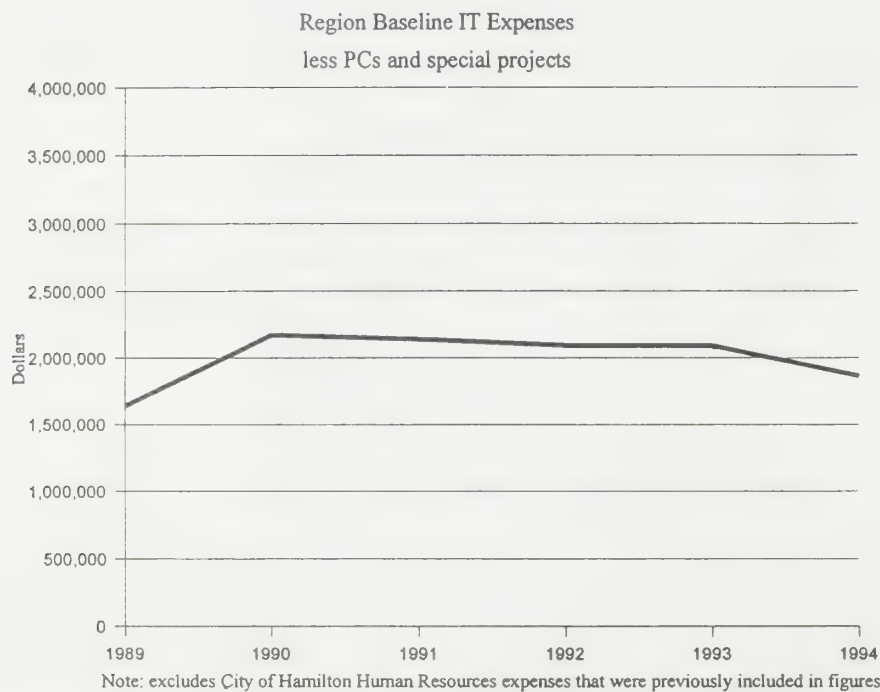


Figure 3

*Figure 4* represents the City of Hamilton "baseline" information technology costs for 1991 to 1994 that excludes expenses determined directly by the departments such as PC workstations and corporate telephone expenses. The City of Hamilton baseline expenses for information technology have declined since 1992.



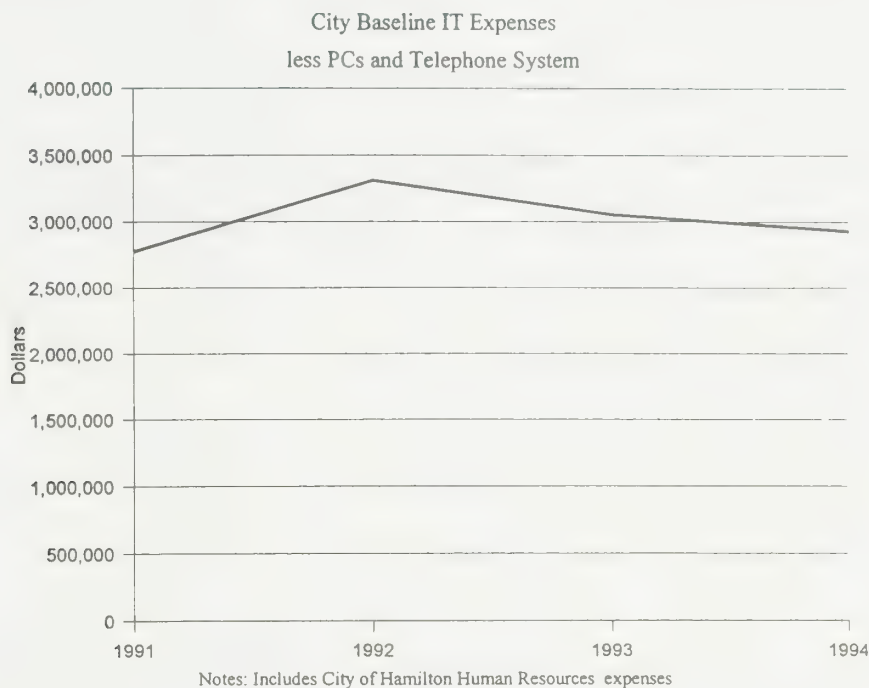


Figure 4

## 2.2 Revenues

Total revenues for 1994 (Figure 5) were \$ 7,108,550, with 61.7% of the operating revenues coming from the City of Hamilton, 34.2% from the Region, and the balance from other sources. There was a 7.7% decrease in revenues from the Region in 1994, primarily as the result of the decreased utilization of on-line disk storage.

## Revenues

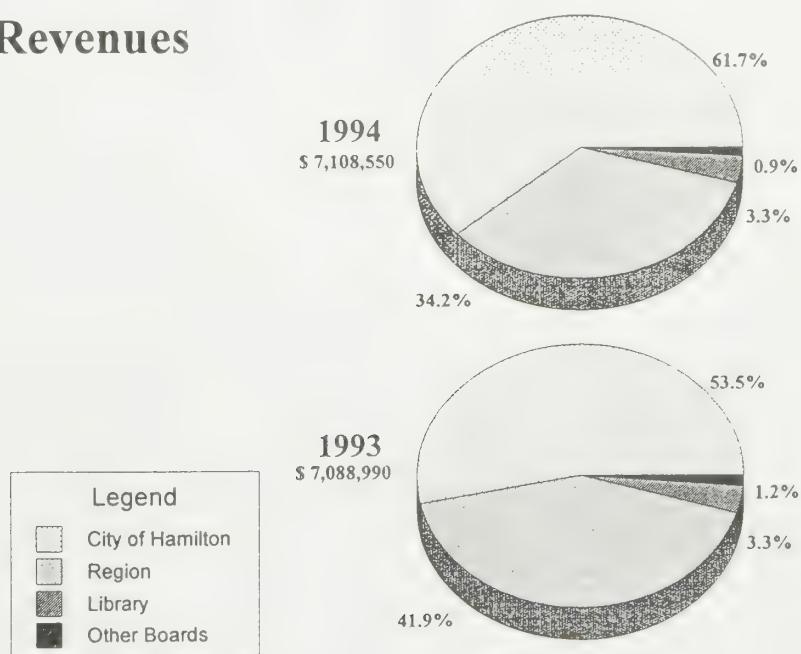


Figure 5

### 3.0 Staffing and Customer Satisfaction

#### 3.1 Staff Compliment

Figure 6 represents the staff compliment for Information Systems from 1990 to 1994 and the current planned compliment in 1995 after restructuring. The staff compliment in 1994 was 59 FTEs (full time equivalents). This is exclusive of the nine full time and one part time staff in the Process Control Division (see Section 7).

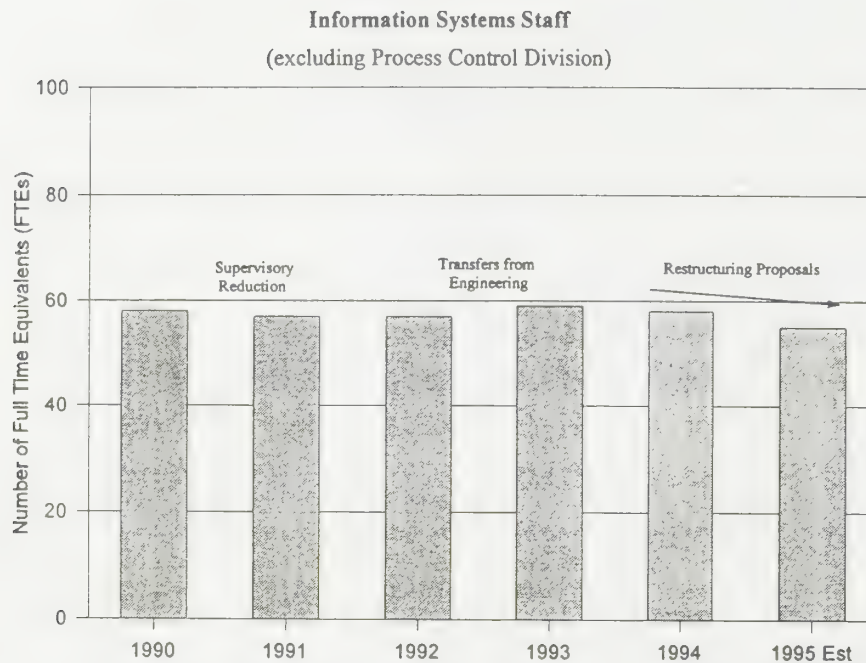


Figure 6

#### 3.2 Overall Customer Satisfaction

In May 1994, Information Systems conducted their second survey of all our customers. The 1994 survey results indicated a high degree of satisfaction with Information Systems in a number of areas. The 1994 survey requested clients to rate the customer satisfaction on a variety of issues using a five point scale (poor, fair, good, very good, excellent). We considered scores of "fair" or "poor" to be unsatisfactory.

Overall, our Region and City clients are very satisfied with the "customer orientation" of Information Systems staff (88%). (See Appendix B)



## 4.0 Business Systems Application Services

Business Systems Applications Services include the Systems Analysis and Programming functions required for the design, development, and maintenance of all systems applications.

### 4.1 Systems Analysis and Programming

Figure 7 represents the total number of Systems Analysis hours used by each municipal corporation from 1989 to 1994. In 1994 there was a decrease in the number of Systems Analysis hours used by the Region.

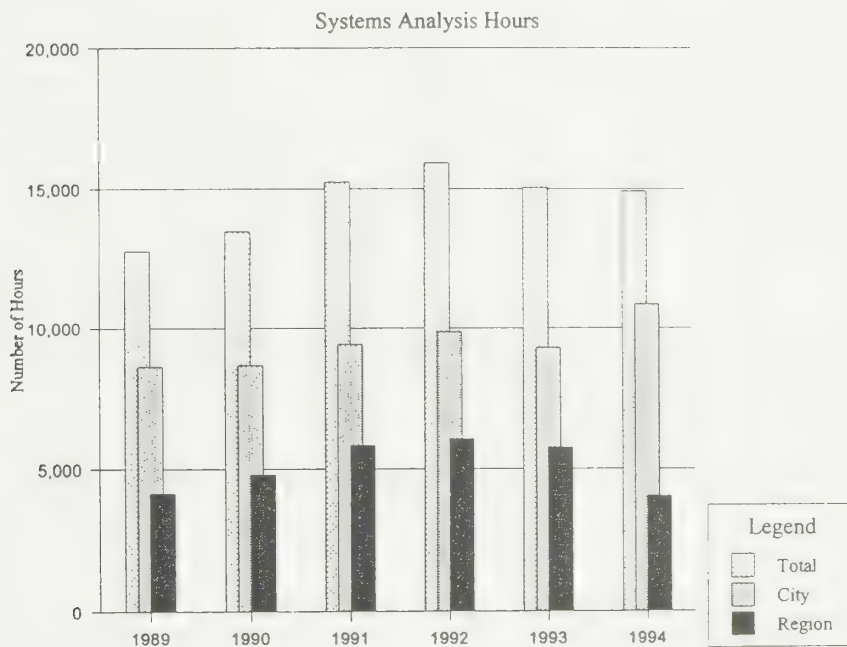


Figure 7

Figure 8 represents the total number of Programming hours used by each municipal corporation from 1989 to 1994. In 1994 there was a decrease in the number of Programming hours used by the Region.

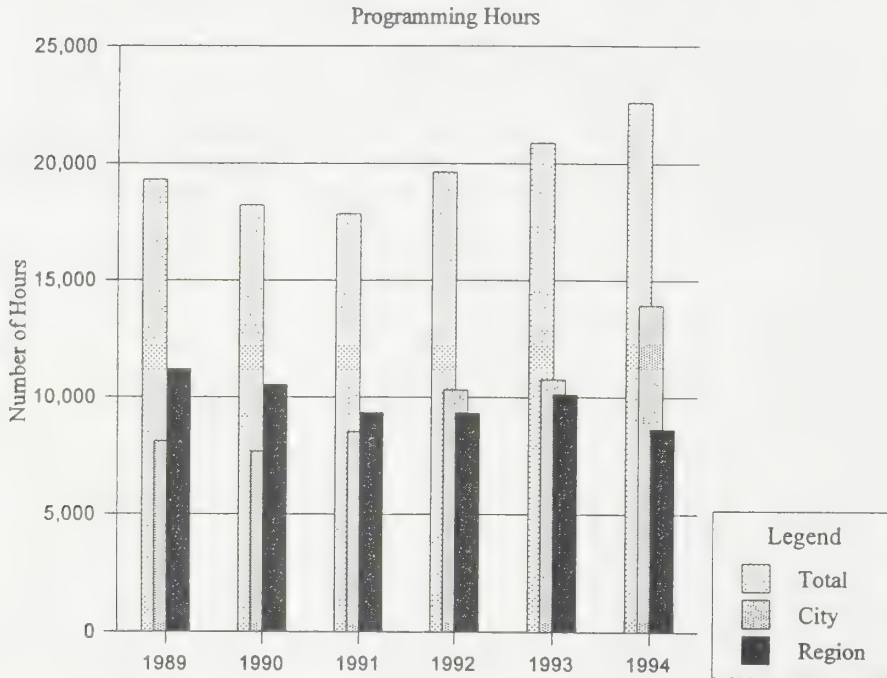


Figure 8

The unit cost for systems analysis and programming services is indicated in Figure 9 for the 1990 through 1994 period. The unit costs for systems analysis and programming have shown some variation as they are dependent upon a number of factors including; union increases, work restructuring, and the corporate and social contract layoff days that affect the number of chargeable hours.

The current rates for systems analysts and programmers are competitive with the private sector (\$50-\$90/hour for systems analysts, and \$40-\$50/hour for programmers)

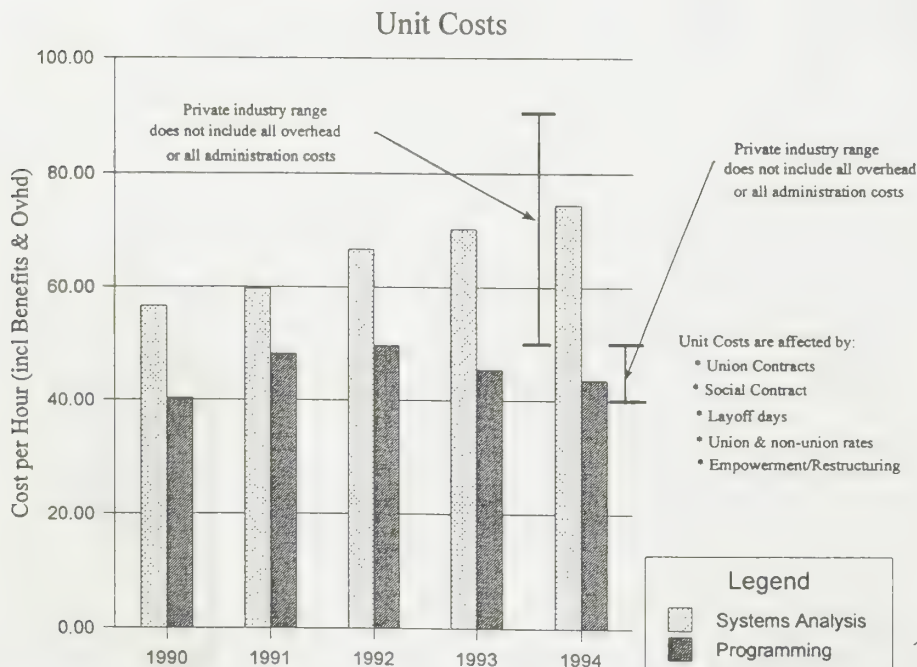


Figure 9



## 4.2 Maintenance Load

The "Maintenance Load" for Application Development is an indication of the percentage of systems analysis and programming resources dedicated to maintaining existing applications, rather than for the enhancement or development of new applications. The maintenance load for Regional applications (*Figure 10*) was 10% more than in 1994. The maintenance load for the City increased in 1994, primarily as the result of the additional work required for the 1994 Municipal Election.

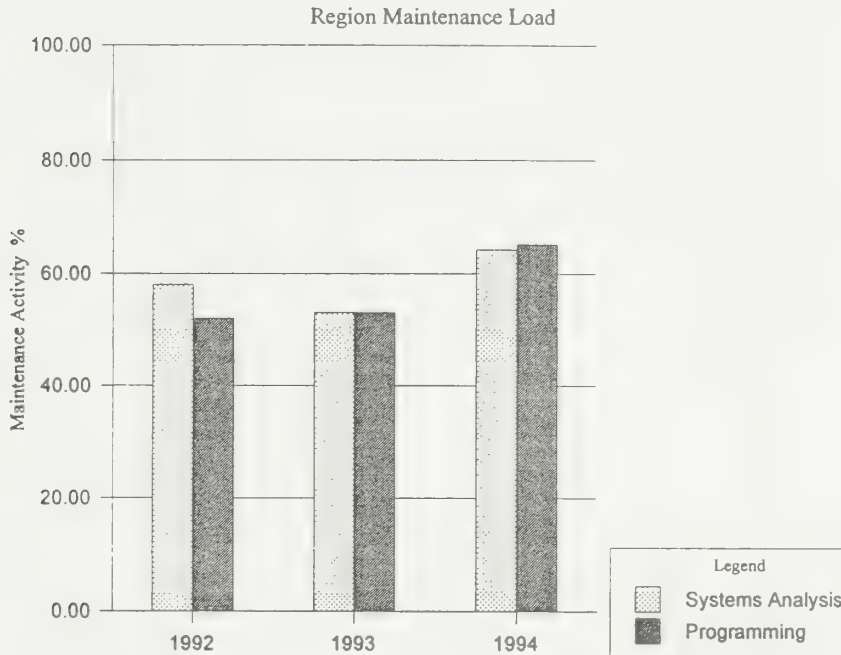


Figure 10

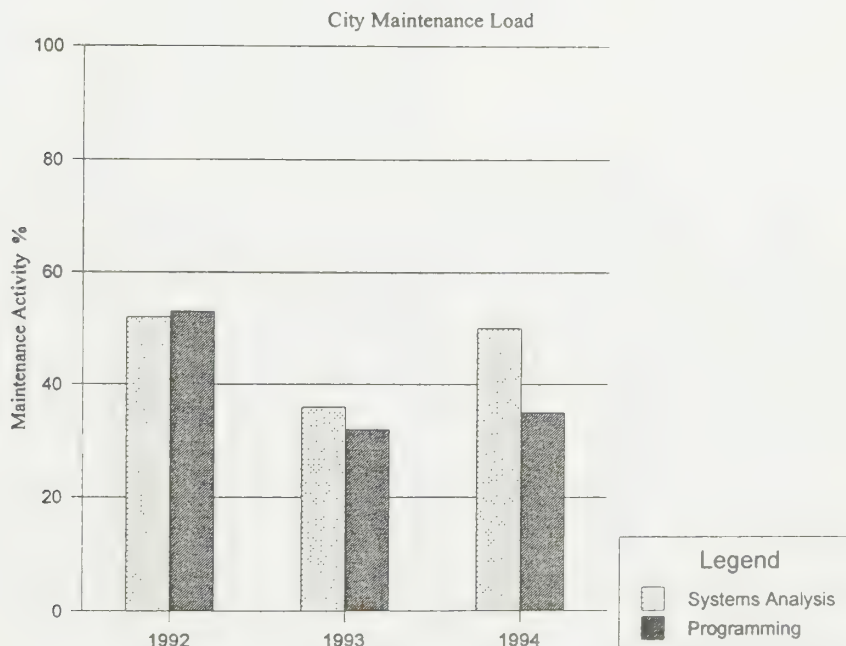


Figure 11

## 5.0 Operations Services

Operations Services include central computer processing time, disk space availability, print lines, data entry, and microfilming services.

### 5.1 Processing Capacity

The demand on corporate mainframe computer resources continues to increase as the municipal departments provide more staff with on-line access, and batch processing loads for system applications and functions. The number of host connections has increased by 185% and 33% respectively for the Region and City since 1989 (Figure 12).

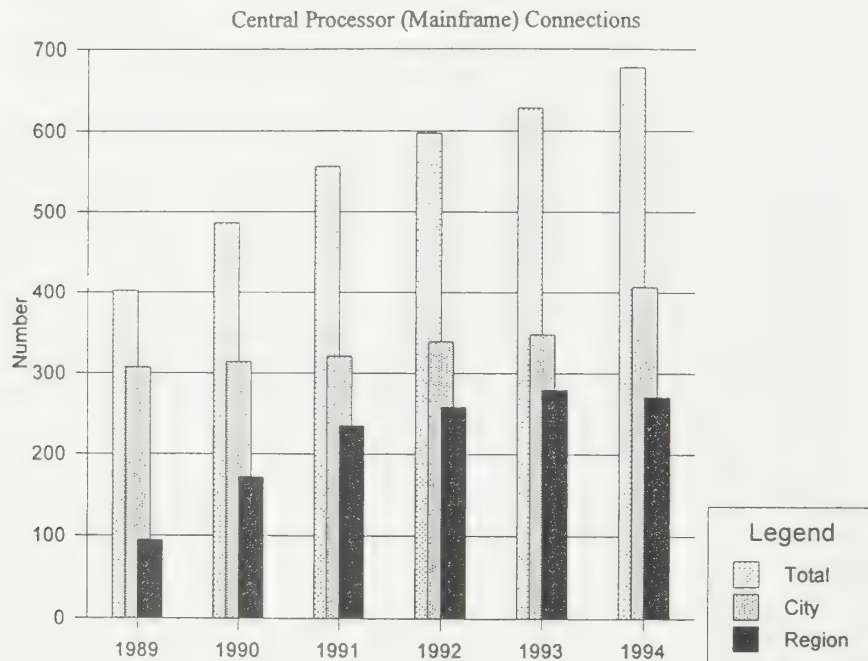


Figure 12

Figure 13 indicates the central computer processor loading from January 1993 through December of 1994. Host loading should not normally exceed 75% as this is the level at which performance degradation starts to occur. As processor loading increases above 75%, the processor no longer has sufficient resources to manage online and batch requests. Response time to all requests then increases to the point that performance "failure" occurs when no further requests can be processed.

On 1994 July 1, the central processor capacity was increased by 40% (at no additional annual cost) to address the excessive loading problem that was identified in the fall of 1993.



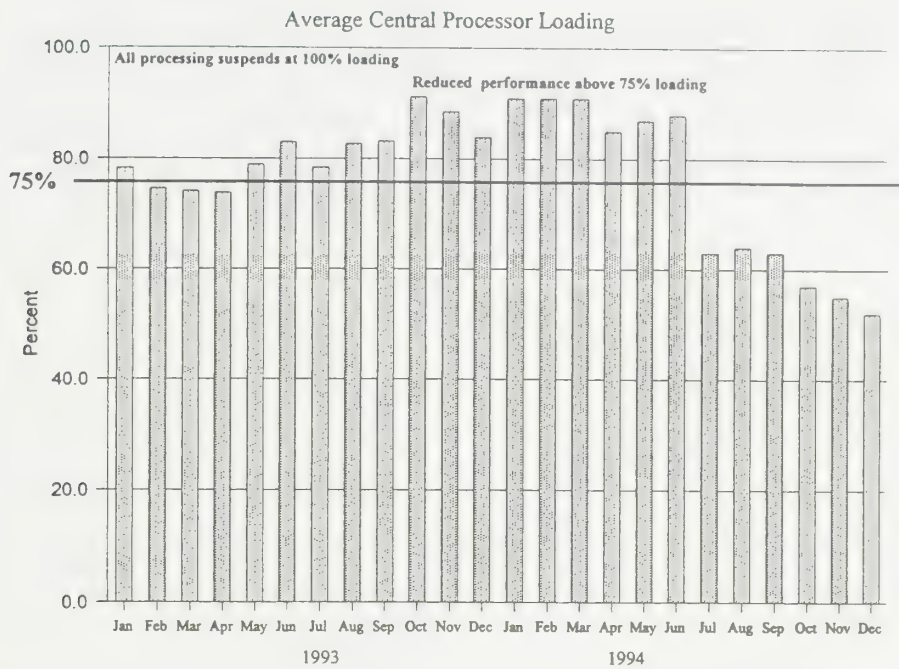


Figure 13

## 5.2 Utilization of Resources

The utilization and costs for Operations Services for 1994 and previous years is as follows:

Figure 14 represents the relative utilization of the IBM host processor by the Region and the City of Hamilton. The Region utilized 39.1% of the central processor time in 1994. The distribution trend in the use of central processor resources is not expected to change significantly.

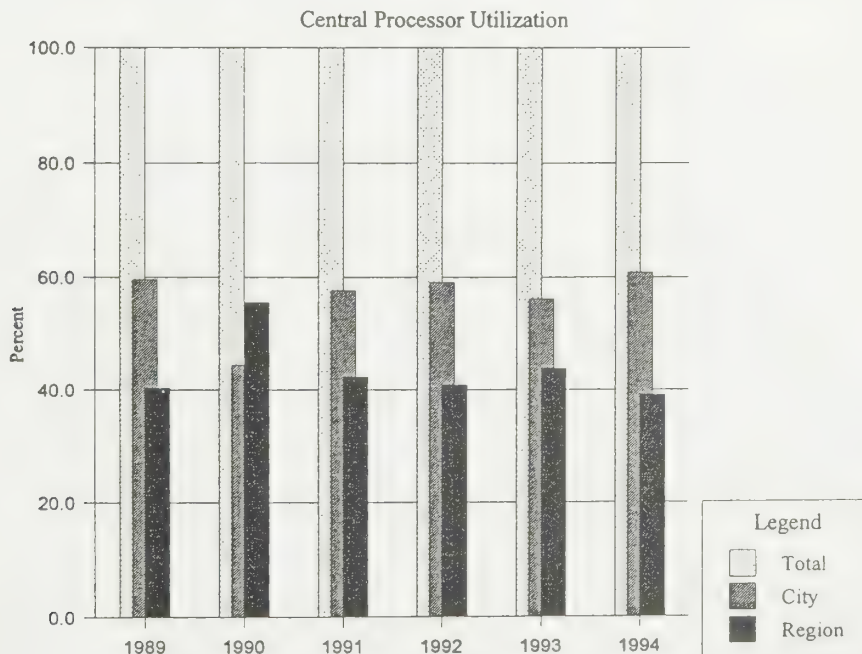


Figure 14

Figure 15 represents the utilization of data storage disk space that is shared by the Region and the City of Hamilton. The Region utilized 40% or 29.5 billion bytes of the 74 billion bytes of disk space available in 1994. The total disk space requirement has increased 64% since 1989. The change in distribution in 1994 was due to a temporary requirement of the City to retain data on line and temporarily suspend file purging activities.

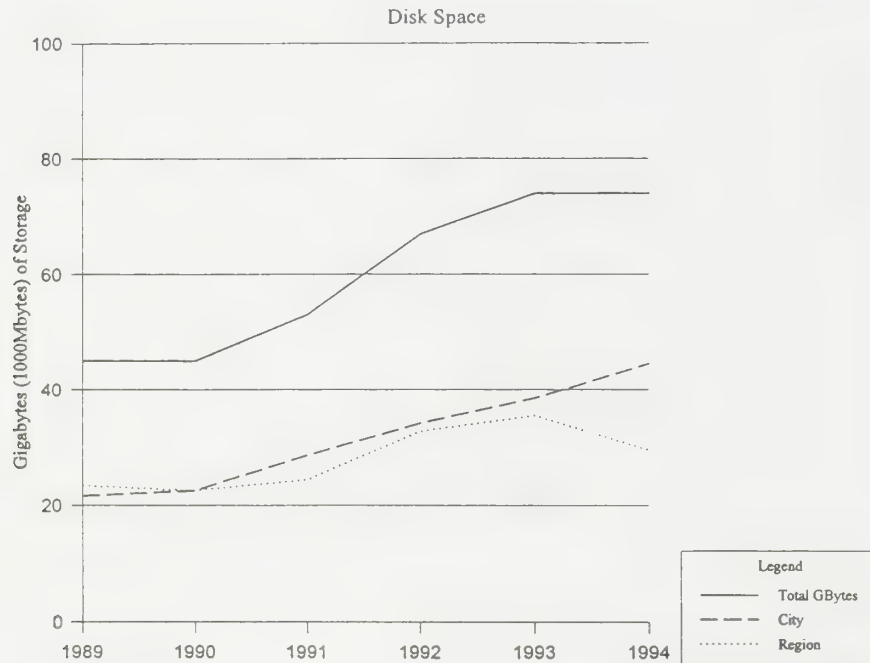


Figure 15

### 5.3 Central Processor (CPU) and Disk Costs

The unit costs of the mainframe processor and disk space are represented in Figure 16. Although the demand for disk storage is increasing, the reductions in unit costs for disk space are expected to continue. Although the central processor unit costs increased in 1994, the number of units required decreased (due to the faster processor installed in July). The net effect was a slight reduction in total central processing costs.

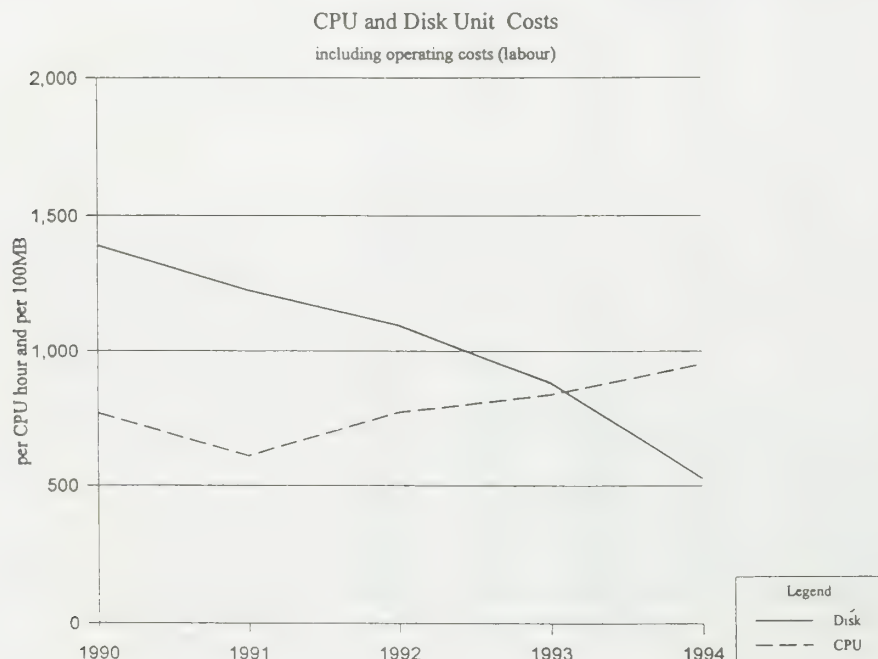


Figure 16



#### 5.4 Printing and Data Entry Services

Print line and data entry volumes are indicated in *Figure 17* and unit costs in *Figure 18*. Print Lines in 1994 were 194,878,728 which represents a 42% increase since 1989.

Data Entry volumes were 31,153,572 keystrokes in 1994 -- an increase over 1993 due to changes to the Parking Offenses Act but a 33% decrease since 1989. Data entry volumes are expected to decline in the future as automated data capture technology is introduced.

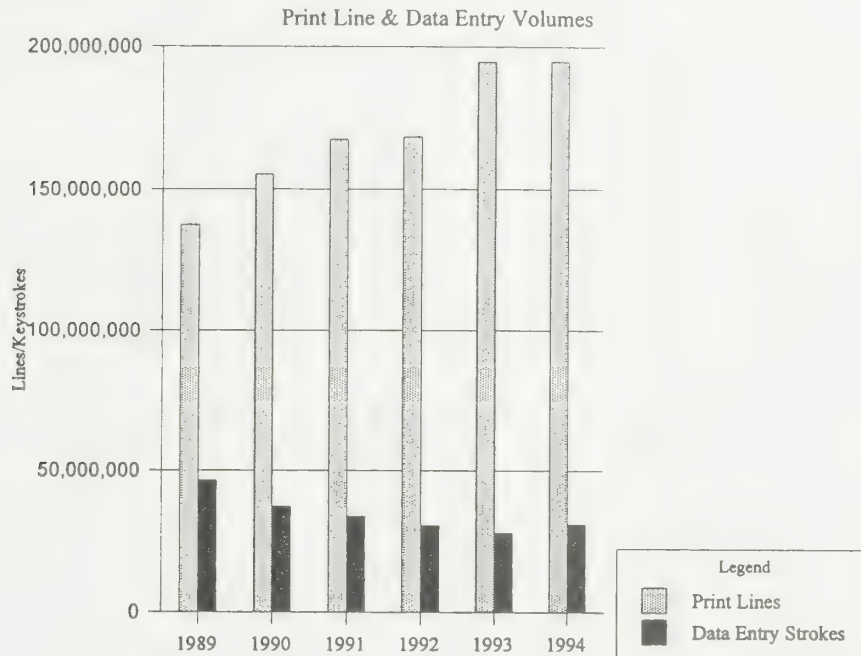


Figure 17

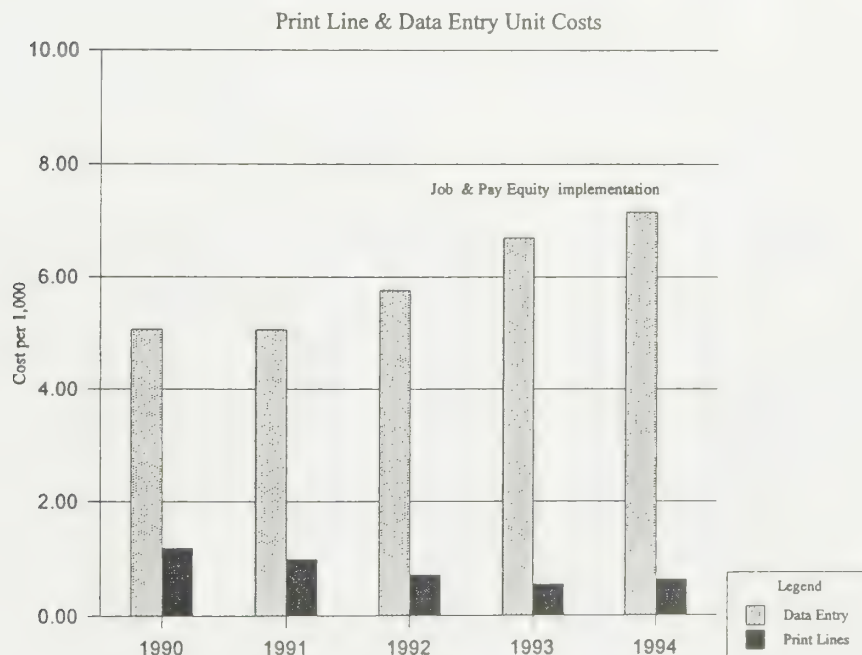


Figure 18

### 5.5 Microfilming Services

The use of microfilming services by the Region and City is indicated in *Figure 19*. Although an increase in volume occurred in 1994, microfilming image service volumes have declined by 20% since 1989 to 2,846,162 images.

*Figure 20* indicates the Microfilming image volumes and unit costs for the 1989 through 1994 period. Microfilming unit costs have been influenced by the Ontario Pay Equity legislation.

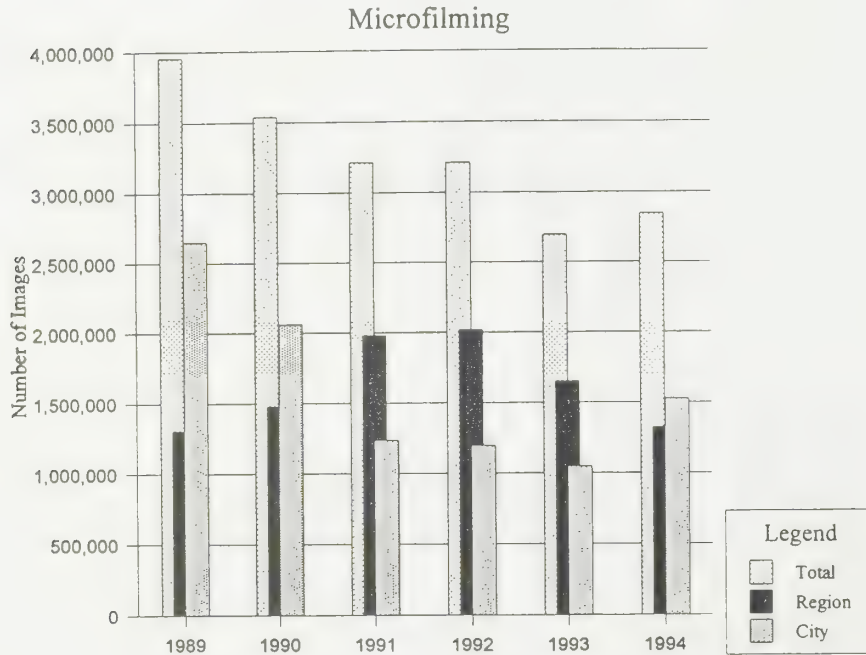


Figure 19

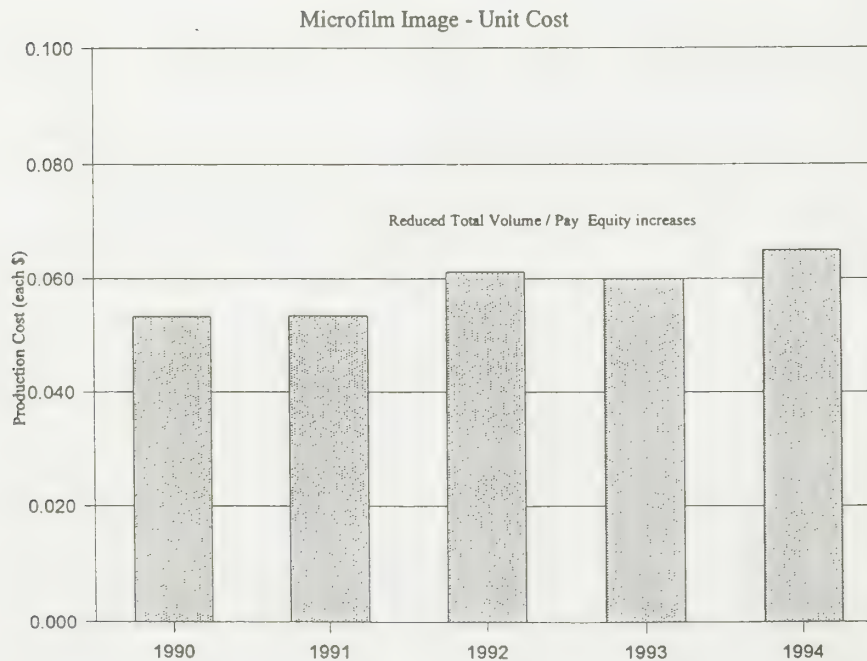


Figure 20

## 5.6 Corporate Network Services

As part of the information technology strategy, all users that connect to various types of computing resources will be migrated to a single, common, corporate-wide network such that all users and facilities will be available to any authorized user regardless of location. By the end of 1994 there were 1,098 connections to the corporate or other proprietary networks, of which an increasing number were connected via the Corporate Network.

The migration of users from coaxial connection technology to the integrated network technology is represented in *Figure 21*.

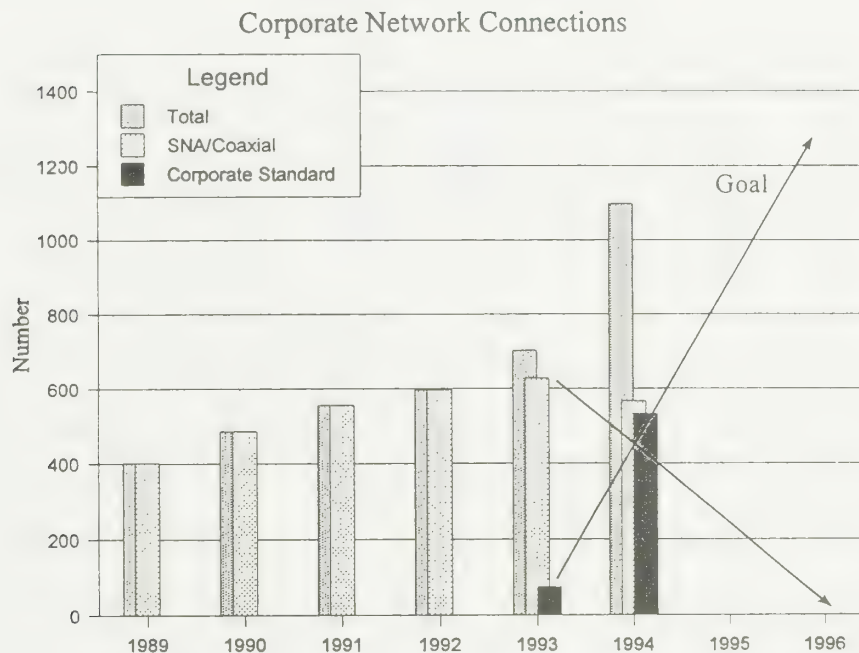


Figure 21

## 6.0 Support Services

The requirements for PC (Personal Computer) services and support are directly related to the number of PCs in operation, the type and complexity of the software being supported, and the degree to which the PCs are networked.

The number of PC workstations has been increasing, as expected, with a total increase for the Region and City of more than 200% since 1990. As of 1994 December 31 there were 950 PCs in service. This increase is expected as departments continue to automate functions to reduce staffing costs. The change in the number of PC workstations supported and the corresponding demand for Support resources is represented in *Figure 22*.



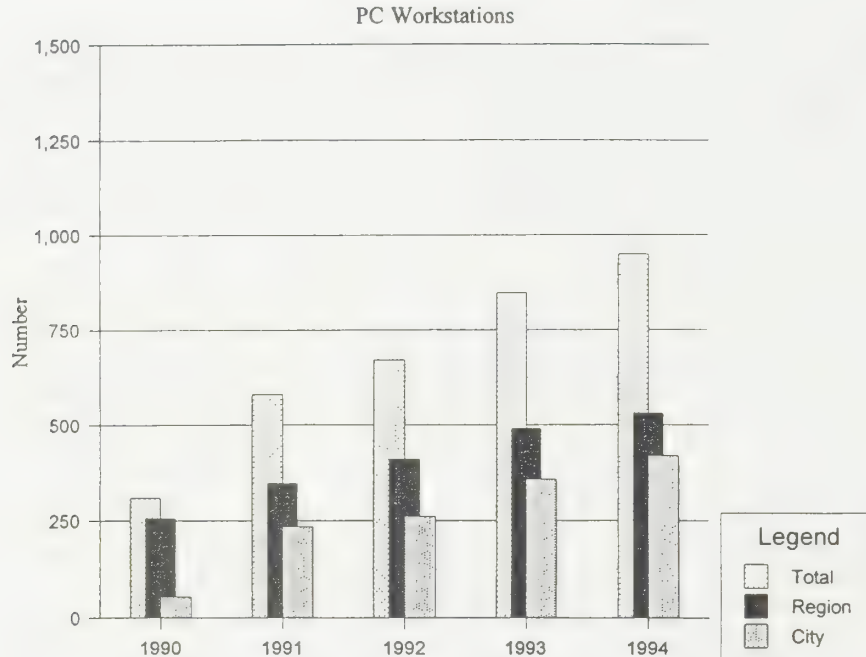


Figure 22

Typical percentages of employees with PCs for 100 of the top "Fortune 500" companies varies between 53% in the retail sector and 92% in the financial sector. The PC workstation rate for the Region and City is approximately 43%, assuming 2,200 employees may effectively use PC workstation technology.

In spite of an increase in the complexity of the support functions and the installation of PCs onto the Corporate network, the support cost per PC has maintained a downward trend (27% reduction) since 1990 as indicated in Figure 23. This primarily reflects an increase in the number of PCs supported per Support Services Technician.

The typical support level for PCs is 13 support services technicians per 1,000 PCs (1989 survey). On this scale, the current support level for the Municipal Corporations is 6 per 950 PCs (6.3 per 1,000 PCs) or a little less than 1/2 the industry norm.

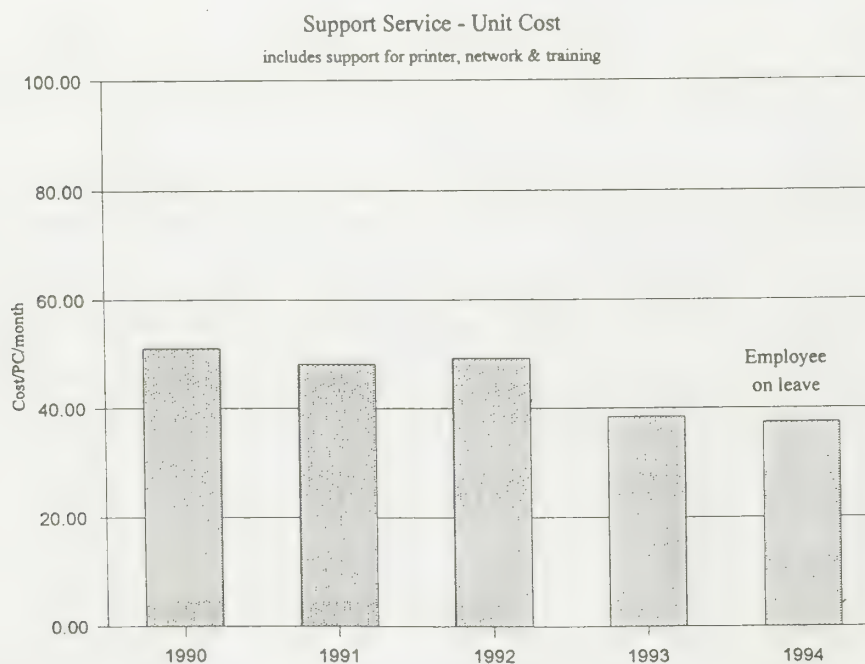


Figure 23

## **7.0 Process Control Services**

During 1994, the Process Control division provided general systems support to the Transportation and Environmental Services users, internal network support to other I/S divisions, as well as Corporate network support and technical expertise, inventory application support to the Traffic Department, and miscellaneous services to other departments.

In 1994, the computer systems at the Process Control site had the following average performance measurements:

System availability: >99.97%  
System response time: 0.254 seconds

The following summarizes the main Process Control activities during 1994.

### **Network, Communications, Hardware**

- ▶ Support was provided to the Support Services Division for PC network installations.
- ▶ The following file servers were configured and installed :
  - Human Resources Dept server (Wilson)
  - City Fleet server (Tracy)
  - Environmental Services Hansen server (Env02)
  - Environmental Services Labs server (Triton)
- ▶ One VAX 4200 server (Aldor) in City Hall was upgraded to an Alpha 2100/500. The resulting configuration provides greater CPU and disk capacity at a reduced annual cost.
- ▶ Windows Remote Corporate Network software was developed, tested and released.
- ▶ TeamLinks Email was installed for the Law Department.
- ▶ Communications routers were installed between Wentworth and Victoria Ave N to support the Hansen system installation.
- ▶ A fiber network was installed at the Woodward Ave Treatment facility. This network supports process control function for the Sewage Treatment Plant.
- ▶ 10BaseT wiring was installed in four buildings at the Sewage Treatment Plant.
- ▶ A fiber patch panel was installed in the Central Utilities Plant (CUP) and the City Hall to Ellen Fairclough Building fiber cable was re-routed through it.
- ▶ Fiber cables were installed connecting the CUP with both the Hamilton Public Library and the Robert Thompson building.
- ▶ Fiber cables were installed in the Wentworth Street transit centre to replace the coax-based network.
- ▶ The Maximo building management system (database server and PC clients) was installed in the Central Utilities Plant for the Property Department.
- ▶ The Parcel sub-networks in both the Ellen Fairclough and City Hall were changed from coax to 10BaseT.
- ▶ The Environmental Services Victoria Ave North network was changed from coax to 10BaseT.
- ▶ Network designs and plans were developed for:
  - the Hamilton Public Library (Central and all branch locations).
  - additional floors at 25 Main St West
  - the Wentworth and Macassa Lodges
  - fiber cabling between Fleet and 125 Barton
  - the Health department (Alcohol and Drug Assessment division)

## Applications

- ▶ The Hansen Infrastructure Management System was installed and configured on the Environmental Services file server.
- ▶ A Taxi Scrip tracking and reconciliation system was developed and implemented for Accessible Transportation Services.
- ▶ A new release of the Automatic Vehicle Location and Communications (AVLC) system was installed for HSR.
- ▶ A new release of the Claims system was developed and installed for Safety Services and Adjusters.
- ▶ Bar code readers were investigated for both the HSR and Traffic Inventory Management Systems. After evaluation, both organizations decided to defer implementation of the technology.
- ▶ As part of the Human Resources Information System (HRIS) project, HSR's needs, requirements and process flow were analyzed. Process Control participated on the HRIS project team.
- ▶ Some HSR users were converted from WordPerfect V6.0 (Windows) to Word V6.0 (Windows) to eliminate network resource problems.
- ▶ Modifications were made to a number of production systems to:
  - accommodate Attendance Management System rule changes
  - allow the entry of OSSIP (On Street Service Improvement Program) forms
  - integrate with the Customer Contact database
  - enter blanket purchase orders to the Inventory Management System
  - change the inventory count options and procedures
  - changes to Timekeeping and work orders
  - improve the interface between the Ticket/Pass System and the Accounts Receivable System

Figure 24 represents the expenses and revenues for the Process Control Division for the period from 1990 to 1994. Net expenses declined marginally in 1994.

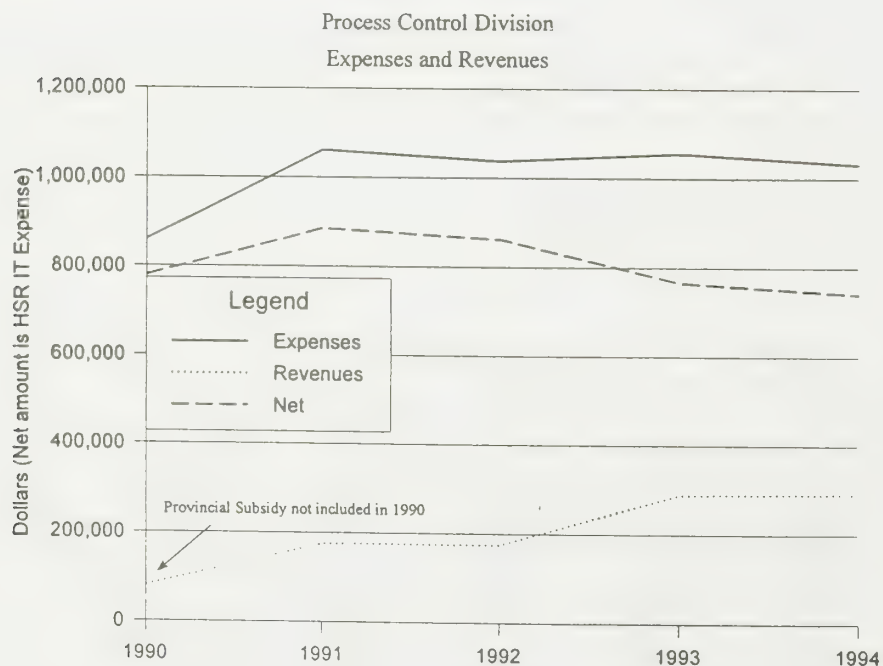


Figure 24



## 8.0 Telephone Services

Information Systems assumed the management of the Corporate telephone system operation on behalf of the Region and the City as of 1991 January 1. Since 1991, Information Systems has managed the centralized (Bell - Centrex) portion of the telecommunications infrastructure on behalf of most Region and City Departments including policy development, contracts, installations, changes, and the centralized portions of the cost. Two systems are primarily supported; Northern Telecom Centrex and Norstar; both of which integrate as a single system via Centrex (546) lines and services.

The costs for new equipment, long distance or specialized services (e.g. voicemail) is billed directly to the departments. The common cost components for telephone services are included within a separate account centre at the Region that is subsequently charged back to the Regional departments. The centralized City telephone services are included within the portion of the Information Systems budget which is charged to the City of Hamilton.

Figure 25 represents the number of Centrex phone lines for the Region and City at the end of each year. At the end of 1994 there were 2,659 Centrex lines in use by both corporations. This is an increase of 390 lines from 1993, primarily due to the implementation of Area-Wide Centrex services.

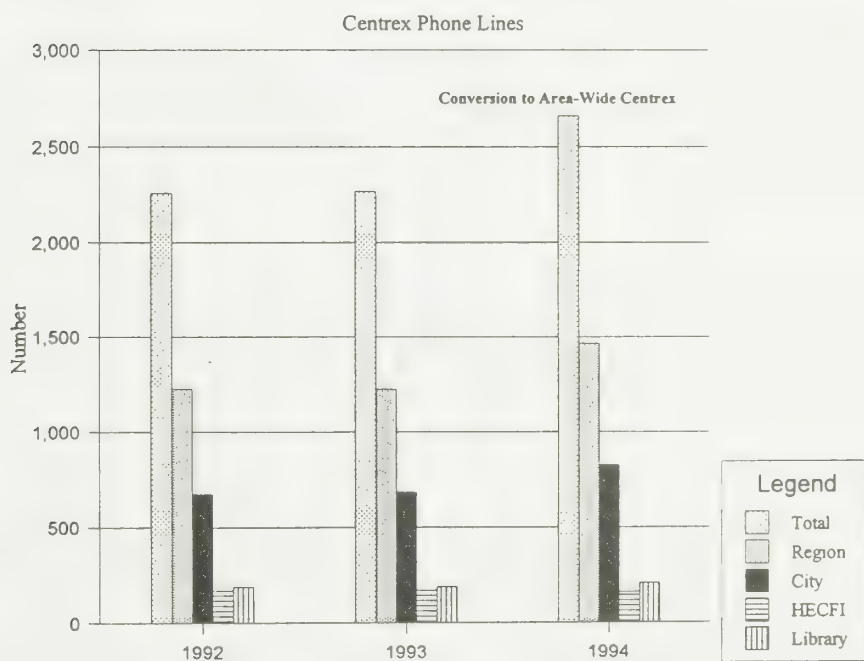


Figure 25

Figure 26 indicates the total cost for centralized telephone services. The cost has decreased due to several cost reduction initiatives as well as the conversion to Area Wide Centrex in 1994.

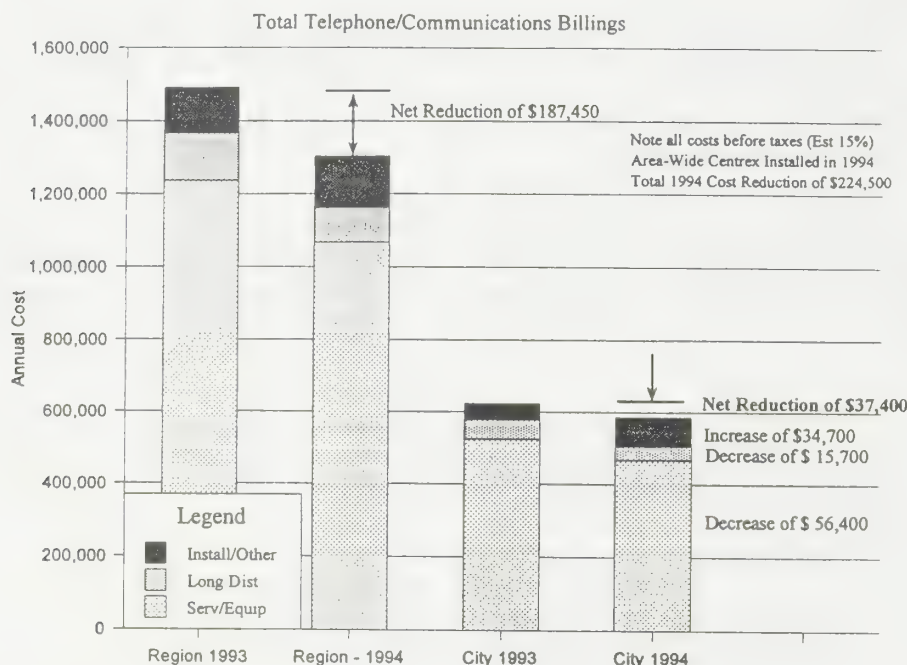


Figure 26

### 8.1 Telephone System Milestones

In 1994, the Canadian telecommunications industry continued its transition towards greater competition, improved services and generally lower costs. As a result, Information Systems has been able to secure more favourable terms from our primary supplier which has resulted in reduced costs of more than \$220,000.00 from 1993.

More specifically, this has been made possible by, an additional 16% discount on long distance and up to 23% on equipment; with most savings accruing directly to the Region and City Departments. Savings are also being realized by our migrating away from original supplier rental and maintenance agreements towards third-party leasing and maintenance suppliers. Also, most large wiring jobs are now being performed by third-party contractors.

Specific initiatives in 1994 included:

- ▶ Extending Centrex 546 services to most Corporate area offices, thereby providing a more integrated system with direct savings from lower cost lines and direct Toronto calling privileges.
- ▶ Implementation of Incoming Call Display
- ▶ Implementation of P.S.T.N. (Public Switched Telephone Network); limiting access to local calling; which saved \$40,000 a year.
- ▶ Obtaining improved discounts on our Advantage Preferred long distance package and facilitating the removal of dedicated WATS lines that are no longer cost-effective.
- ▶ Facilitating a review of 9-1-1 emergency phone expenses and purchasing them outright for 40% (\$3,000 per year) saving.

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The Region of Hamilton-Wentworth and The City of Hamilton  
**INFORMATION SYSTEMS**

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- ▶ Performing various usage studies on the Toronto "free-calling" trunk lines and optimizing level of service.
- ▶ Initiating the execution of a 5 year contract for pay phones to increase municipal revenues by 5%; with plans to review potential locations and implement access standards for physically challenged residents.
- ▶ Facilitating Norstar system installations (primarily with Centrex service) at:
  - Region Locations: The Health Mountain Unit (Phase 2) and Dundas Unit, and Macassa Lodge portable (relocation).
  - City Locations: The Hamilton Public Library Concession Street, Culture and Recreation Twin Pad Arena, and Macassa Fire Station.
- ▶ Facilitating numerous installations/upgrades with/to Centrex phones, including replacing Social Services' Vantage and Norstar systems/phones at 74 Hughson.
- ▶ Processing 358 service requests to install, change and remove telephones and lines (as compared to 371 service request changes in 1993).

### **Detailed Breakdown of Service Expenditures for 1994**

*Appendix C* includes a complete breakdown of all expenditures for the sixteen different information systems services provided in 1994. The detail includes the amount and cost of each type of service provided to each Region and City department. Process Control costs are not included as they are billed separately.

### **Further Information**

For further information on the Information Systems Services provided to the Region or the City please contact:

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L8N 4E2  
  
Phone: (905) 546-4562  
Fax: (905) 546-2573  
Internet Address: [jhindson@netaccess.on.ca](mailto:jhindson@netaccess.on.ca)



## Appendix A

### 1993 Survey of Information Technology expenses in Canadian Municipalities

Total Information Technology costs are less than all other Municipalities in the survey

| Municipality                  | Total Budget  | IT Budget    | % IT |
|-------------------------------|---------------|--------------|------|
| A                             | \$600,000,000 | \$13,600,000 | 2.17 |
| B                             | 654,507,905   | 9,465,486    | 1.45 |
| C                             | 1,722,000,000 | 24,772,000   | 1.44 |
| D                             | 480,900,000   | 6,000,000    | 1.25 |
| E                             | 249,711,100   | 3,037,000    | 1.22 |
| Hamilton-Wentworth & Hamilton | 847,440,000   | 8,635,710    | 1.02 |

### 1993 Survey of Information Technology employees in Canadian Municipalities

and staff size is less than most of the other Municipalities in the survey

| Municipality                  | Total Employees | IT Employees | % IT |
|-------------------------------|-----------------|--------------|------|
| E                             | 2,050           | 40           | 1.95 |
| C                             | 10,300          | 183          | 1.78 |
| A                             | 6,000           | 100          | 1.67 |
| B                             | 9,000           | 117          | 1.30 |
| Hamilton-Wentworth & Hamilton | 7,000           | 71           | 1.01 |
| D                             | 6,200           | 54           | 0.87 |

Appendix B

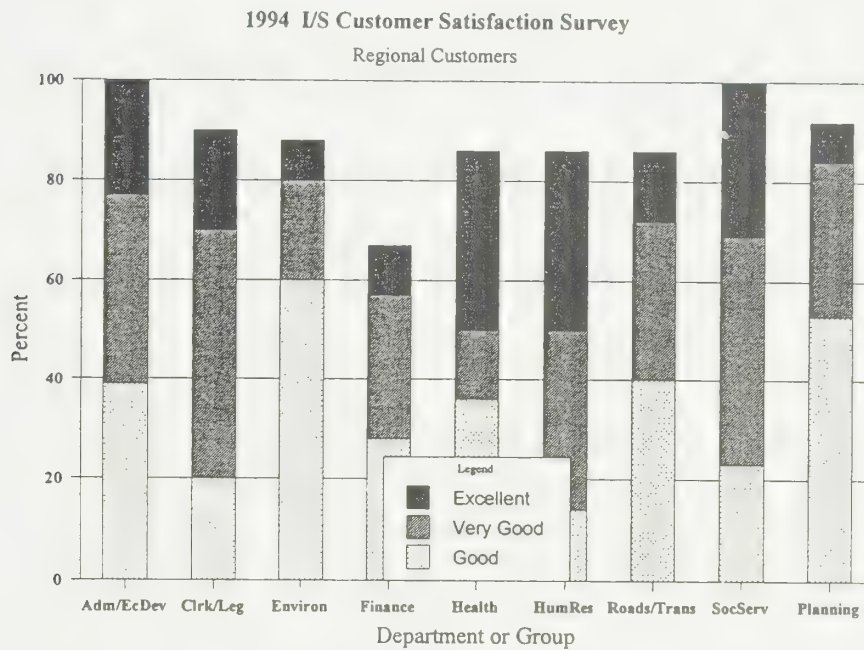


Figure 1  
 (Region)

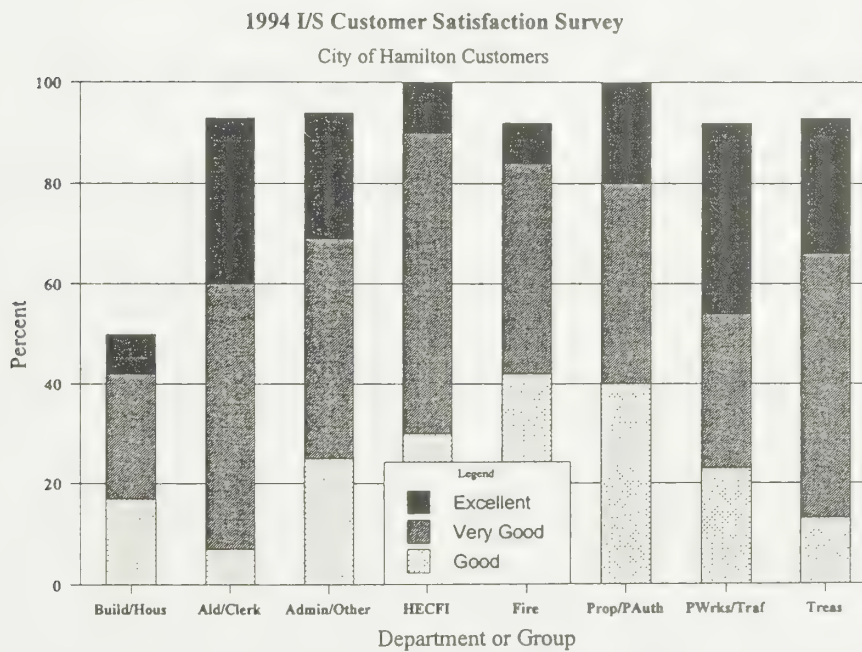


Figure 2  
 (City)

INFORMATION SYSTEM SERVICES  
1994 YEAR END ACTUAL

| DEPARTMENT                    | (1)<br>DATA ENTRY<br>STROKES | (2)<br>MICROFILM<br>IMAGES | (3)<br>MATRIX<br>PRINTING | (4a)<br>BATCH<br>CPU-HRS | (4b)<br>ON-LINE<br>CPU-HRS | (5)<br>DASD<br>% | (6)<br>ANALYST<br>HOURS | (6)<br>COST |
|-------------------------------|------------------------------|----------------------------|---------------------------|--------------------------|----------------------------|------------------|-------------------------|-------------|
| City Building                 | 0                            | 216,445                    | 2,377,247                 | 1,449                    | 0.66                       | 0.21             | 5.0                     | 373         |
| City CAO                      | 0                            | 0                          | 0                         | 0                        | 0.00                       | 0.00             | 0.0                     | 0           |
| City Clerk                    | 895,233                      | 52,616                     | 7,322,292                 | 4,616                    | 1.48                       | 1.20             | 529.0                   | 39,413      |
| City Culture & Recreation     | 0                            | 0                          | 0                         | 0                        | 0.03                       | 0.00             | 315.0                   | 23,469      |
| City Fire                     | 0                            | 0                          | 2,611,088                 | 1,646                    | 6.02                       | 0.61             | 61.5                    | 4,582       |
| City Housing                  | 0                            | 0                          | 0                         | 0                        | 0.00                       | 0.00             | 0.0                     | 0           |
| City HECFI                    | 0                            | 0                          | 0                         | 0                        | 0.01                       | 0.00             | 0.0                     | 0           |
| City HumRes                   | 4,848,726                    | 325,138                    | 18,671,522                | 11,771                   | 6.69                       | 3.84             | 1,201.0                 | 89,480      |
| City BAS Development & IOS    | 0                            | 0                          | 29,813                    | 19                       | 0.00                       | 0.00             | 3,097.0                 | 230,742     |
| City Law                      | 166,925                      | 1,195                      | 0                         | 0                        | 0.00                       | 0.00             | 0.0                     | 0           |
| City Library                  | 0                            | 0                          | 6,474,556                 | 4,082                    | 61.16                      | 8.62             | 264.0                   | 19,669      |
| City Parking Authority        | 0                            | 0                          | 0                         | 0                        | 0.00                       | 0.00             | 0.0                     | 0           |
| City Property-RealEst/Other   | 0                            | 0                          | 0                         | 0                        | 0.06                       | 0.00             | 0.0                     | 0           |
| City Property-Architects      | 0                            | 0                          | 23,483                    | 15                       | 0.00                       | 0.00             | 0.0                     | 0           |
| City Public Works             | 19,509                       | 140                        | 266,605                   | 168                      | 0.02                       | 0.03             | 157.5                   | 11,735      |
| City Traffic                  | 0                            | 5,552                      | 2,184                     | 1                        | 0.05                       | 0.03             | 117                     | 1,974       |
| City Treasury-ParkViol        | 13,688,726                   | 88,955                     | 3,750,652                 | 2,365                    | 1.43                       | 0.72             | 612.5                   | 45,634      |
| City Treasury-Exist PropTax   | 4,805,235                    | 82,801                     | 14,595,981                | 9,202                    | 21.11                      | 3.32             | 12,911                  | 112,651     |
| City Treasury-PropTax Proj    | 0                            | 43,940                     | 1,754,777                 | 1,106                    | 96.27                      | 11.56            | 2,713.0                 | 202,132     |
| City Treasury-Accounting      | 3,524                        | 710,292                    | 34,508,304                | 21,756                   | 430.72                     | 30.03            | 358.0                   | 26,673      |
| Region CAO                    | 0                            | 0                          | 0                         | 0                        | 0.00                       | 0.00             | 0.0                     | 0           |
| Region CAO-IntAudit           | 0                            | 0                          | 0                         | 0                        | 0.00                       | 0.00             | 0.0                     | 0           |
| Region Chairman               | 0                            | 0                          | 0                         | 0                        | 0.00                       | 0.00             | 0.0                     | 0           |
| Region Airport                | 0                            | 0                          | 0                         | 0                        | 0.00                       | 0.00             | 0.0                     | 0           |
| Region Clerk                  | 0                            | 0                          | 172,049                   | 108                      | 1.24                       | 0.41             | 1,594                   | 0           |
| Region Economic Development   | 0                            | 0                          | 0                         | 0                        | 0.00                       | 0.00             | 0.0                     | 0           |
| Region Eng. CustServ          | 0                            | 1,595                      | 0                         | 0                        | 0.03                       | 0.00             | 125.5                   | 9,350       |
| Region Eng. EnviroServ        | 0                            | 0                          | 0                         | 0                        | 0.00                       | 0.00             | 0.0                     | 0           |
| Region Eng. PARCIL            | 0                            | 0                          | 0                         | 0                        | 0.00                       | 0.00             | 0.0                     | 0           |
| Region Eng. Roads             | 0                            | 0                          | 376,551                   | 237                      | 0.05                       | 0.00             | 116.5                   | 8,680       |
| Region Eng. Traffic Accidents | 0                            | 29,826                     | 240,986                   | 152                      | 1.87                       | 0.66             | 3.5                     | 261         |
| Region Finance-Accounting     | 0                            | 1,001,440                  | 35,720,544                | 22,520                   | 331.24                     | 21.92            | 347.5                   | 25,890      |
| Region Finance-Budgets        | 0                            | 0                          | 0                         | 0                        | 0.00                       | 0.00             | 11.0                    | 820         |
| Region Finance-Metered Water  | 112,970                      | 809                        | 17,732,260                | 11,179                   | 51.94                      | 8.26             | 186.0                   | 13,858      |
| Region Finance-Revenue        | 0                            | 0                          | 0                         | 0                        | 0.00                       | 0.00             | 185.0                   | 13,783      |
| Region HSR                    | 0                            | 0                          | 0                         | 0                        | 0.00                       | 0.00             | 0.0                     | 0           |
| Region Health                 | 0                            | 15,235                     | 5,368                     | 3                        | 0.00                       | 0.04             | 0.0                     | 0           |
| Region Human Resources        | 6,560,790                    | 4,574                      | 0                         | 0                        | 0.00                       | 0.00             | 0.0                     | 0           |
| Region Legal Services         | 53,934                       | 178,098                    | 18,452,434                | 11,633                   | 42.50                      | 3.70             | 1,379.5                 | 102,780     |
| Region Planning               | 0                            | 0                          | 557,861                   | 352                      | 0.01                       | 0.00             | 0.0                     | 0           |
| Region Police                 | 0                            | 68,854                     | 0                         | 0                        | 0.00                       | 0.00             | 0.0                     | 0           |
| Region SocServ-Day Care       | 0                            | 0                          | 0                         | 0                        | 0.00                       | 1.67             | 0.0                     | 0           |
| Region SocServ-DayCare WIP    | 0                            | 0                          | 1,487,873                 | 938                      | 2.62                       | 0.90             | 7.0                     | 522         |
| Region SocServ-Homes          | 0                            | 0                          | 101,372                   | 64                       | 0.00                       | 0.00             | 19.0                    | 1,416       |
| Region SocServ-Inc Mtce       | 0                            | 265                        | 0                         | 0                        | 0.17                       | 0.00             | 0.0                     | 0           |
| Region SocServ-Incdtce WIP    | 0                            | 0                          | 26,570,806                | 16,752                   | 36.61                      | 2.47             | 1,071.0                 | 79,795      |
| TOTAL                         | 31,153,572                   | 223,042                    | 194,878,728               | 122,862                  | 512.09                     | 100.00           | 559.0                   | 41,648      |
| Region Total                  | 6,727,694                    | 48,167                     | 1,320,423                 | 85,937                   | 176                        | 39.83            | 4,055                   | 302,117     |
| City & Library Total          | 24,425,878                   | 174,876                    | 1,525,739                 | 99,299                   | 336                        | 60.17            | 10,852                  | 808,527     |

# Appendix C

## Expenses by Department/Group



INFORMATION SYSTEM SERVICES

1994 YEAR END ACTUAL

| DEPARTMENT                     | PROG<br>HOURS | (7)     | (8a)<br>COMM<br>Conn-Mo. | COST    | (9d)<br>PC CPUs<br>No. | (9e)<br>SUPPORT<br>CPU-MO. | COST    | (11)<br>USER HOST<br>SOFTWARE | (12)<br>USER PC<br>SOFTWARE | (13)<br>CITY PC<br>LSE/MTCE | (14)<br>REG PC<br>LSE/MTCE | (15)<br>VAX/<br>CITY INS | (16)<br>CONTR.<br>OTHER | (17)<br>OTHER | 1994<br>TOTAL<br>COST |
|--------------------------------|---------------|---------|--------------------------|---------|------------------------|----------------------------|---------|-------------------------------|-----------------------------|-----------------------------|----------------------------|--------------------------|-------------------------|---------------|-----------------------|
| City Building                  | 7.0           | 305     | 204                      | 7,975   | 63                     | 753                        | 28,203  |                               |                             | 0                           | 90,243                     | 0                        | 0                       | 0             | 145,500               |
| City CAO                       | 0.0           | 0       | 36                       | 1,407   | 4                      | 42                         | 1,573   |                               |                             | 0                           | 4,238                      | 0                        | 0                       | 0             | 7,220                 |
| City Clerk                     | 608.0         | 26,496  | 540                      | 21,109  | 44                     | 523                        | 19,589  |                               | 110                         | 65,260                      | 0                          | 0                        | 0                       | 0             | 199,870               |
| City Culture & Recreation      | 0.0           | 0       | 132                      | 5,160   | 52                     | 624                        | 23,372  |                               |                             | 58,669                      | 0                          | 0                        | 0                       | 0             | 110,700               |
| City Fire                      | 22.5          | 981     | 204                      | 7,975   | 16                     | 196                        | 7,341   |                               |                             | 27,200                      | 0                          | 0                        | 0                       | 0             | 60,500                |
| City Housing                   | 0.0           | 0       | 12                       | 469     | 1                      | 9                          | 337     |                               |                             | 1,123                       | 0                          | 0                        | 0                       | 0             | 1,930                 |
| City HECFI                     | 0.0           | 0       | 252                      | 9,851   | 0                      | 0                          | 0       |                               |                             | 59,765                      | 0                          | 0                        | 0                       | 0             | 69,630                |
| City HumRes                    | 1,866.0       | 81,318  | 240                      | 9,382   | 21                     | 254                        | 9,513   | 17,795                        | 1,085                       | 22,089                      | 0                          | 0                        | 0                       | 0             | 375,030               |
| City BAS Development & IOS     | 3,342.0       | 145,640 | 624                      | 24,393  | 31                     | 374                        | 14,008  | 76,384                        | 32,930                      | 263,908                     | 2,435                      | 0                        | 15,860                  | 0             | 791,020               |
| City Law                       | 0.0           | 0       | 180                      | 7,036   | 22                     | 264                        | 9,888   |                               |                             | 21,841                      | 0                          | 0                        | 0                       | 0             | 38,770                |
| City Library                   | 248.0         | 10,808  | 852                      | 33,305  | 0                      | 0                          | 0       | 12,240                        |                             | 0                           | 0                          | 0                        | 0                       | 0             | 353,500               |
| City Parking Authority         | 0.0           | 0       | 36                       | 1,407   | 8                      | 96                         | 3,596   |                               |                             | 13,095                      | 0                          | 0                        | 0                       | 0             | 18,100                |
| City Property-RealEstate/Other | 0.0           | 0       | 168                      | 6,567   | 21                     | 254                        | 9,513   |                               |                             | 23,985                      | 0                          | 0                        | 0                       | 0             | 40,140                |
| City Property-Architects       | 0.0           | 0       | 0                        | 0       | 0                      | 0                          | 0       |                               |                             | 0                           | 0                          | 0                        | 0                       | 0             | 0                     |
| City Public Works              | 542.5         | 23,641  | 396                      | 15,480  | 58                     | 697                        | 26,106  | 55,400                        | 850                         | 71,091                      | 0                          | 0                        | 0                       | 0             | 205,420               |
| City Traffic                   | 100.0         | 4,358   | 132                      | 5,160   | 31                     | 371                        | 13,896  |                               |                             | 60,444                      | 0                          | 0                        | 0                       | 0             | 91,790                |
| City Treasury-ParkViol         | 84.8          | 3,695   | 0                        | 0       | 48                     | 579                        | 21,686  |                               |                             | 69,597                      | 0                          | 0                        | 0                       | 0             | 258,750               |
| City Treasury-Exist PropTax    | 1,213.5       | 52,883  | 876                      | 34,244  | 0                      | 0                          | 0       |                               |                             | 590                         | 0                          | 0                        | 0                       | 0             | 291,520               |
| City Treasury-PropTax Proj     | 5,259.0       | 229,180 | 0                        | 0       | 0                      | 0                          | 0       |                               |                             | 2,950                       | 0                          | 0                        | 0                       | 0             | 582,320               |
| City Treasury-Accounting       | 653.0         | 28,457  | 0                        | 0       | 0                      | 0                          | 0       | 30,369                        | 110                         | 2,200                       | 0                          | 0                        | 10,300                  | 0             | 789,560               |
| Region CAO                     | 0.0           | 0       | 48                       | 1,876   | 7                      | 84                         | 3,146   |                               |                             | 7,844                       | 0                          | 0                        | 0                       | 0             | 12,870                |
| Region CAO-IntAudit            | 0.0           | 0       | 24                       | 938     | 2                      | 24                         | 899     |                               |                             | 958                         | 0                          | 0                        | 0                       | 0             | 2,800                 |
| Region Chairman                | 0.0           | 0       | 24                       | 938     | 2                      | 24                         | 899     |                               |                             | 719                         | 0                          | 0                        | 0                       | 0             | 2,560                 |
| Region Airport                 | 0.0           | 0       | 0                        | 0       | 3                      | 37                         | 1,386   |                               |                             | 1,597                       | 0                          | 0                        | 0                       | 0             | 2,980                 |
| Region Clerk                   | 0.0           | 0       | 120                      | 4,691   | 17                     | 206                        | 7,716   |                               |                             | 11,093                      | 0                          | 0                        | 0                       | 0             | 28,710                |
| Region Economic Development    | 0.0           | 0       | 36                       | 1,407   | 27                     | 318                        | 11,911  |                               | 50                          | 18,978                      | 0                          | 0                        | 0                       | 0             | 32,350                |
| Region Eng. CustServ           | 0.0           | 0       | 0                        | 0       | 3                      | 41                         | 1,536   |                               |                             | 1,941                       | 0                          | 0                        | 0                       | 0             | 6,790                 |
| Region Eng. EnviroServ         | 319.5         | 13,923  | 216                      | 8,444   | 78                     | 939                        | 35,170  | 0                             | 440                         | 25,911                      | 0                          | 0                        | 0                       | 0             | 93,370                |
| Region Eng. PARCIL             | 0.0           | 0       | 0                        | 0       | 2                      | 23                         | 861     |                               |                             | 16,390                      | 0                          | 2,795                    | 0                       | 0             | 20,050                |
| Region Eng. Roads              | 221.5         | 9,653   | 144                      | 5,629   | 39                     | 467                        | 17,491  |                               |                             | 20,250                      | 0                          | 16,165                   | 0                       | 0             | 78,150                |
| Region Eng. Traffic Accidents  | 9.0           | 392     | 12                       | 469     | 0                      | 0                          | 0       | 30,369                        | 50                          | 0                           | 0                          | 0                        | 0                       | 0             | 7,200                 |
| Region Finance-Accounting      | 1,525.2       | 66,466  | 528                      | 20,640  | 41                     | 490                        | 18,353  |                               |                             | 16,107                      | 0                          | 0                        | 0                       | 0             | 772,440               |
| Region Finance-Budgets         | 0.0           | 0       | 228                      | 8,913   | 28                     | 339                        | 12,697  |                               | 800                         | 5,290                       | 0                          | 0                        | 0                       | 0             | 28,520                |
| Region Finance-Metered Water   | 365.0         | 15,906  | 360                      | 14,073  | 14                     | 173                        | 6,480   |                               |                             | 6,887                       | 7,200                      | 0                        | 0                       | 0             | 174,160               |
| Region Finance-Revenue         | 304.5         | 13,270  | 72                       | 2,815   | 19                     | 231                        | 8,652   |                               |                             | 7,887                       | 7,200                      | 0                        | 0                       | 0             | 53,610                |
| Region HSR                     | 0.0           | 0       | 96                       | 3,753   | 0                      | 0                          | 0       |                               |                             | 44,580                      | 0                          | 0                        | 0                       | 0             | 49,710                |
| Region Health                  | 0.0           | 0       | 48                       | 1,876   | 85                     | 1022                       | 38,279  |                               | 210                         | 27,649                      | 0                          | 0                        | 0                       | 0             | 68,230                |
| Region Human Resources         | 2,181.5       | 95,067  | 240                      | 9,382   | 21                     | 254                        | 9,513   | 17,795                        | 126                         | 23,819                      | 0                          | 0                        | 0                       | 0             | 375,030               |
| Region Legal Services          | 0.0           | 0       | 36                       | 1,407   | 25                     | 300                        | 11,236  |                               | 1,085                       | 31,497                      | 0                          | 0                        | 0                       | 0             | 44,150                |
| Region Planning                | 0.0           | 0       | 204                      | 7,975   | 54                     | 652                        | 24,420  |                               | 470                         | 35,444                      | 0                          | 0                        | 0                       | 0             | 80,640                |
| Region Police                  | 0.0           | 0       | 48                       | 1,876   | 0                      | 0                          | 0       |                               |                             | 680                         | 0                          | 0                        | 0                       | 0             | 2,560                 |
| Region SocServ-Day Care        | 0.0           | 0       | 96                       | 3,753   | 0                      | 0                          | 0       |                               |                             | 0                           | 0                          | 0                        | 0                       | 0             | 22,980                |
| Region SocServ-DayCare WIP     | 76.0          | 3,312   | 0                        | 0       | 0                      | 0                          | 0       |                               |                             | 0                           | 0                          | 0                        | 0                       | 0             | 61,450                |
| Region SocServ-Homes           | 1,197.0       | 52,164  | 24                       | 938     | 21                     | 250                        | 9,364   |                               |                             | 3,449                       | 0                          | 0                        | 0                       | 0             | 13,910                |
| Region SocServ-Inc Mtce        | 0.0           | 0       | 648                      | 25,331  | 41                     | 493                        | 18,465  |                               | 420                         | 23,744                      | 0                          | 0                        | 0                       | 0             | 296,070               |
| Region SocServ-IncMtce WIP     | 1,588.0       | 69,203  | 0                        | 0       | 0                      | 0                          | 0       |                               |                             | 0                           | 0                          | 0                        | 0                       | 0             | 81,070                |
| Region SocServ-IncMtce WIP     | 854.0         | 37,216  | 0                        | 0       | 0                      | 0                          | 0       |                               |                             | 0                           | 0                          | 0                        | 0                       | 0             | 0                     |
| TOTAL                          | 22,587.5      | 984,334 | 8,136                    | 318,043 | 950                    | 11,403                     | 427,094 | 240,352                       | 38,736                      | 858,288                     | 332,714                    | 16,835                   | 29,260                  | 0             | 6,843,630             |
| Region Total                   | 8,641         | 376,572 | 3,252                    | 121,123 | 531                    | 6,367                      | 238,473 | 48,164                        | 3,651                       | 0                           | 332,714                    | 14,400                   | 18,960                  | (15,860)      | 2,412,360             |
| City & Library Total           | 13,946        | 607,762 | 4,884                    | 190,920 | 420                    | 5,036                      | 188,621 | 192,188                       | 35,085                      | 858,288                     | 0                          | 2,435                    | 10,300                  | 15,860        | 4,431,270             |

## Appendix C

### Expenses by Department/Group







HAMILTON PUBLIC LIBRARY



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